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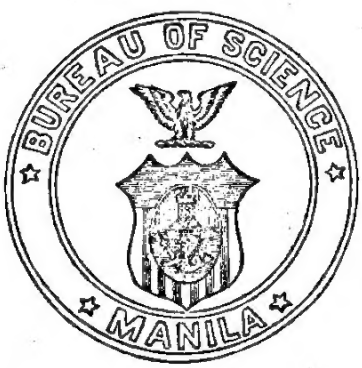

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RELIQUIAE ROBINSONIANAE

BY E. D. MERRILL
(From the Botanical Section of the Biological Laboratory, Bureau of Science, Manila, P. I.)

(Concluded.)

SAXIFRAGACEAE

POLYOSMA Blume

POLYOSMA BRACHYANTHA sp. nov.

Arbor usque ad 16 m alta inflorescentiis exceptis glabra; foliis alternis, integris, oblongis, utrinque subaequaliter angustatis, apice prominente acuminatis, basi acutis, usque ad 17 cm longis, nervis utrinque circiter 12, subtus prominentibus; racemis usque ad 14 cm longis, puberulis, multifloris; floribus 4-meris, 1 cm longis, petalis extus minute adpresse puberulis, intus prominente pilosis.

A tree attaining a height of 16 m, entirely glabrous except the inflorescence. Branches and branchlets terete, grayish or brownish. Leaves alternate, firmly chartaceous, olivaceous and somewhat shining when dry, in general oblong, 10 to 17 cm long, 2.5 to 5.5 cm wide, entire, subequally narrowed to the acute base and to the prominently acuminate apex, the acumen usually rather slender, often minutely apiculate; lateral nerves about 12 on each side of the midrib, prominent, anastomosing, the reticulations lax; petioles 1 to 2 cm long. Racemes terminal, solitary, many flowered, up to 14 cm in length, minutely but not densely puberulent with short, appressed, rather pale hairs. Flowers white, 4-merous, 1 cm long, their pedicels puberulent, 1 to 2 mm long, the subtending bracts very small, oblong-ovate, less than 1 mm long. Calyx-tube appressed-puberulent, about 2 mm long, the teeth 4, broadly triangular-ovate, acute, short. Petals 8 mm long, about 1.4 mm wide, obtuse, externally minutely and sparingly ap-

pressed-puberulent, internally prominently pilose. Filaments pilose. Style glabrous. Fruits black when dry, subellipsoid, glabrous, usually apiculate, 7 to 9 mm long.

AMBOINA, Hitoe messen, *Rel. Robins. 1814, 1815, 1816* (type), October and November, 1913, in forests at an altitude of about 200 meters; Gelala, *Rel. Robins. 1812*, September 19, 1913, altitude about 100 meters; Waë, *Rel. Robins. 1813*, in light forest at an altitude of about 20 meters, locally known as *kayumuka*.

The species is well characterized by its unusually short flowers and is possibly most closely allied to *Polyosma stenosiphon* Schltr. of New Guinea. It differs from that species, however, in very many characters, and while apparently common in Amboina, it does not seem previously to have been described.

PITTOSPORACEAE

PITTOSPORUM Banks

PITTOSPORUM RAMIFLORUM Zoll. ex Miq. Fl. Ind. Bat. 1[2] (1858) 122.

Glyaspernum ramiflorum Zoll. & Mor. Nat. Genees. Neerl. Ind. 2 (1845) 11.

AMBOINA, Hoenoet, *Rel. Robins. 1663*, October 8, 1913, on limestone formations in light woods, altitude about 175 meters.

The specimen agrees perfectly with material from trees cultivated in the botanic garden at Buitenzorg, labelled as having originated in Amboina.

LEGUMINOSAE

SERIANTHES Bentham

SERIANTHES GRANDIFLORA (Wall.) Benth. in Hook. Lond. Journ. Bot. 3 (1844) 225.

Inga grandiflora Wall. Cat. (1832) No. 5285.

AMBOINA, Hatiwe, *Rel. Robins. 2045*, September 15, 1913, in ravines, altitude about 200 meters, locally known as *malaha* and *kadaun*.

Malay Peninsula and Archipelago to the Philippines and New Guinea.

ACACIA Willdenow

ACACIA FARNESIANA (Linn.) Willd. Sp. Pl. 4 (1805) 1083.

Mimosa farnesiana Linn. Sp. Pl. (1753) 521.

AMBOINA, Binting, *Rel. Robins. 2010*, August 13, 1913; cultivated? Locally known as *pohong makassar*.

A native of tropical America, now widely distributed in all hot countries, cultivated and naturalized.

LEUCAENA Bentham

LEUCAENA GLAUCA (Linn.) Benth. in Hook. Journ. Bot. 4 (1842) 416.

Mimosa glauca Linn. Sp. Pl. (1753) 520.

AMBOINA, Batoe merah, *Rel. Robins. 2016*, August 24, 1913, at low altitudes.

A native of tropical America, now widely distributed in all hot countries.

CROTALARIA Linnaeus

CROTALARIA SALTIANA Andr. Bot. Rep. (1811) *t. 648.*

Crotalaria striata DC. Prodr. 2 (1825) 131.

AMBOINA, Batoe merah, *Rel. Robins. 2011*, July 20, 1913, in rocky soil at low altitudes. BALI, Boeleleng, *Rel. Robins. 2533*, July 7, 1913.

All tropical countries; where native uncertain, but probably tropical America.

INDIGOFERA Linnaeus

INDIGOFERA TRIFOLIATA Linn. Amoen. Acad. 4 (1759) 327.

AMBOINA, Soeli, *Rel. Robins. 2017*, November 25, 1913, in grass lands, altitude about 25 meters.

India and Ceylon to southern China, southward through Malaya to tropical Australia.

DESMODIUM Desvaux

DESMODIUM HETEROCARPUM (Linn.) DC. Prodr. 2 (1825) 337.

Hedysarum heterocarpon Linn. Sp. Pl. (1753) 747.

Desmodium polycarpum DC. Prodr. 2 (1825) 334.

AMBOINA, Soja road, *Rel. Robins. 2014*, August 1, 1913, on grassy hillsides, altitude 100 to 300 meters.

Tropical Asia and Africa through Malaya to tropical Australia and Polynesia.

DESMODIUM TRIFLORUM (Linn.) DC. Prodr. 2 (1825) 334.

Hedysarum triflorum Linn. Sp. Pl. (1753) 749.

AMBOINA, town of Amboina, *Rel. Robins. 2015*, July 30, 1913. BOETON, Baoe-baoe, *Rel. Robins. 2483*, July 13, 1913.

Tropics of both hemispheres.

ALYSCICARPUS Necker

ALYSCICARPUS NUMMULARIFOLIUS (Linn.) DC. Prodr. 2 (1825) 353.

Hedysaryum nummularifolium Linn. Sp. Pl. (1753) 746 p. p., excl. Fl. Zeyl. 288.

AMBOINA, Batoe merah and Batoe gadjah, *Rel. Robins. 2043*, July and August, 1913, roadsides, altitude sealevel to 150 meters.

Widely distributed in the tropics of the Old World, introduced in the New World.

URARIA Desvaux

URARIA LAGOPODIOIDES (Linn.) Don Prodr. Fl. Nepal. (1825) 324.

Hedysarum lagopodioides Linn. Sp. Pl. (1753) 1198.

Hedysarum lagopoides Burm. f. Fl. Ind. (1768) 168, *t. 53, f. 2.*

AMBOINA, Lateri and Batoe gadjah, *Rel. Robins. 2013*, August, 1913, grassy hillsides and along trails, altitude 100 to 150 meters. CELEBES, Macassar, *Rel. Robins. 2460*, July 11, 1913.

India to southern China southward through Malaya to tropical Australia.

PHYLACIUM Bennett

PHYLACIUM BRACTEOSUM Benn. Pl. Jav. Rar. (1840) 159, *t. 33.*

AMBOINA, Paso, *Rel. Robins. 2018*, July 8, 1913, in thickets at low altitudes.

Malay Peninsula and Archipelago to the Philippines and New Guinea.

DALBERGIA Linnaeus *f.*

DALBERGIA DENSA Benth. in Hook. Lond. Journ. Bot. 2 (1843) 217.

AMBOINA, Liang, *Rel. Robins. 2040*, November 29, 1913, near the seashore. Amboina, Jobi, Aru Islands, Key Archipelago, and New Guinea.

DALBERGIA FERRUGINEA Roxb. Hort. Beng. (1814) 98, *nomen*, Fl. Ind. ed. 2, 3 (1832) 228.

AMBOINA, Waë, *Rel. Robins. 2041*, November 29, 1913, in thickets at low altitudes.

Borneo, the Philippines, and the Moluccas to New Guinea and the Caroline Islands.

DERRIS Loureiro

DERRIS ELEGANS (Grah.) Benth. Pl. Jungh. (1852) 252.

Pongamia elegans Grah. in Wall. Cat. (1832) no. 7540.

AMBOINA, Hitoe messen, *Rel. Robins. 2019*, October 10, 1913, in forests, altitudes about 120 meters.

Tenasserim, the Andaman Islands, Malay Peninsula, Sumatra, and the Philippines.

TERAMNUS Swartz

TERAMNUS LABIALIS (Linn. f.) Spreng. Syst. 3 (1826) 235.

Glycine labialis Linn. f. Suppl. (1781) 325.

CELEBES, Macassar, *Rel. Robins. 2451*, July 11, 1913. BOETON, Baoe-baoe, *Rel. Robins. 2486*, July 13, 1913.

Widely distributed in the tropics of both hemispheres.

MUCUNA Adanson

MUCUNA CYANOSPERMA K. Schum. in K. Schum. & Hollr. Fl. Kaiser Wilh. Land (1889) 98.

AMBOINA, Liang, *Rel. Robins. 2049*, November 29, 1913, climbing over trees, altitude about 15 meters, locally known as *garichi bundoc* and *raraweya*.

The Moluccas and New Guinea.

FLEMINGIA Roxburgh

FLEMINGIA STROBILIFERA (Linn.) R. Br. in Ait. Hort. Kew. ed. 2, 4 (1812) 350.

Hedysarum strobiliferum Linn. Sp. Pl. (1753) 764.

AMBOINA, Paso, *Rel. Robins. 2009*, September 8, 1913, in thickets at low altitudes, locally known as *slai-slai*. BALI, Boeleleng, *Rel. Robins. 2523*, July 7, 1913.

India to southern China and Malaya, introduced in Mauritius and in the West Indies.

PHASEOLUS Linnaeus

PHASEOLUS LUNATUS Linn. Sp. Pl. (1753) 724.

AMBOINA, Mahiya, *Rel. Robins. 2046*, August 12, 1913, limestone formations at an altitude of about 300 meters, locally kown as *kakara puti*.

A native of tropical America, now found wild and cultivated in all tropical countries.

LINACEAE

HUGONIA Linnaeus

HUGONIA ROBINSONII sp. nov.

Frutex scandens glaber, ramis teretibus, ramulis plus minusve angulatis; foliis chartaceis, lanceolatis ad oblongo-lanceolatis, usque ad 20 cm longis, utrinque subaequaliter angustatis, apice acute acuminatis, basi acutis, nitidis, margine crenulato-denticulatis, nervis utrinque 14 ad 16, curvatis, anastomosantibus; inflorescentiis terminalibus, paniculatis, multifloris; sepalis glabris, orbiculari-ovatis, rotundatis, circiter 2 mm longis; petalis oblongis, circiter 8 mm longis, apice obtusis, basi angustatis, cuneatis.

A scandent glabrous shrub 2.5 m long or more, entirely glabrous. Branches terete, lenticellate, pale-brownish, the branchlets dark reddish-brown, somewhat angled when dry. Leaves chartaceous, shining, lanceolate to oblong-lanceolate, 11 to 20 cm long, 4 to 5.5 cm wide, those on the inflorescence much smaller, subequally narrowed to the prominently and acutely acuminate apex and to the acute base, margins rather distantly crenulate-denticulate; lateral nerves 14 to 16 on each side of the midrib, curved, anastomosing, rather distinct on the lower surface, the reticulations rather close; petioles about 5 mm long. Inflorescence a terminal, somewhat leafy, many-flowered panicle up to 30 cm in length, the leaves subtending the branches or partial inflorescences much reduced in size, 2 to 7 cm in length, the hooks stout, recurved, attaining a length of at least 5 cm. Flowers numerous, orange-yellow, the bracts acicular, about 5 mm long, the bracteoles similar but much shorter. Sepals orbicular-ovate, rounded, about 2 mm long. Petals oblong, about 8 mm long, 2.5 mm wide, rounded or obtuse at the apex, base narrowed, cuneate. Stamens 10, the free parts of the shorter filaments about 1 mm long, of the longer ones 1.5 mm. Ovary oblong, glabrous, 1.5 mm long; styles 5, about 3 mm in length.

AMBOINA, Gelela, *Rel. Robins. 1783*, September 19, 1913, in rocky soil near small streams, altitude about 60 meters.

A characteristic species apparently most closely allied to *Hugonia pentagyna* (Warb.) K. Schum. of New Guinea, from which it differs radically in its floral characters.

ERYTHROXYLACEAE

ERYTHROXYLUM P. Browne

ERYTHROXYLUM ECARINATUM Burck in Ann. Jard. Bot. Buitenz. 11 (1893) 191, *t. 15*.

AMBOINA, Waë, *Rel. Robins. 1854*, November 26, 1913; Hitoe messen, *Rel.*

Robins. 1885, October 18, 1913, in forests, altitude 20 to 250 meters, locally known as *kahunar*.

Amboina, Celebes, Buru, Ceram, and New Guinea.

RUTACEAE

TRIPHASIA Loureiro

TRIPHASIA TRIFOLIA (Burm. f.) P. Wils. in Torreya 9 (1909) 33.

Limonia trifolia Burm. f. Fl. Ind. (1768) 103.
Limonia trifoliata Linn. Mant. 2 (1771) 237.
Triphasia trifoliata DC. 1 (1824) 536.
Triphasia aurantiola Lour. Fl. Cochinch. (1790) 153.

AMBOINA, near the town of Amboina and at Ayer putri, *Rel. Robins. 1767*, July 29 and 30, 1913, in light woods at low altitudes.

The probabilities are that this species has been introduced into Amboina since Rumphius's time. It is now of very wide distribution in the Indo-Malayan region, but is, I believe, very generally an introduced plant, although now spontaneous, and in some regions even dominant.

SIMARUBACEAE

QUASSIA Linnaeus

QUASSIA AMARA Linn. Sp. Pl. ed. 2 (1762) 553.

AMBOINA, *Rel. Robins. 1765*, from cultivated plants in the town of Amboina, said to have been introduced from Timor. A native of tropical America, now widely cultivated in the tropics.

BURSERACEAE

CANARIUM Linnaeus

CANARIUM sp.

AMBOINA, Waë, *Rel. Robins. 1846*, November 26, 1913, in light forests, altitude about 20 meters, locally known as *nanari laki laki*.

The specimen presents only staminate flowers, and in the absence of pistillate flowers and fruits I am unable to place it in its proper section; it may even prove to be referable to *Santiria*.

MELIACEAE

DYSOXYLUM Blume

DYSOXYLUM RUMPHII sp. nov. § *Eudysoxylum*.

Arbor circiter 15 m alta, inflorescentiis exceptis subglabra; foliis circiter 70 cm longis, foliolis circiter 25, inferioribus alternis, superioribus suboppositis, chartaceis, oblongis, usque ad 17 cm longis, basi inaequilateraliter rotundatis, apice acuminatis, nervis utrinque 18 ad 20, prominentibus, patulis; racemis 8 ad 13 cm longis, fasciculatis, e truncis vel e ramis vetustioribus, multifloris, cum pedicellis calycis petalisque dense pubescentibus; floribus pedicellatis, 4-meris, circiter 1 cm longis et 5 mm diametro, calycis prominente 4-lobatis; petalis 4, liberis vel

subliberis; tubo glabro, cylindraceo; ovario 4-loculare, dense pubescente.

A tree about 15 m high, nearly glabrous except the cauline inflorescence which is uniformly and densely brownish-pubescent with short hairs. Branches glabrous, terete, the ultimate ones nearly 1 cm in diameter, grayish or brownish. Leaves alternate, about 70 cm long, the rachis and petiole minutely puberulent, becoming quite glabrous. Leaflets about 25, the lower ones alternate, the upper subopposite, oblong, chartaceous, olivaceous, smooth, shining, glabrous or the younger ones very obscurely puberulent beneath, 10 to 17 cm long, 3 to 5 cm wide, acuminate, base inequilaterally rounded, sessile or subsessile; lateral nerves 18 to 20 on each side of the midrib, spreading, prominent. Racemes fascicled, several springing from the same tubercle on the larger branches and trunk, 8 to 13 cm long, many flowered. Flowers white, 4-merous, their pedicels pubescent, about 5 mm long. Calyx densely pubescent, broadly ovoid-cup-shaped, 6 to 7 mm long, loose, the lobes ovate, 3 to 3.5 mm long, rounded. Petals 4, free or nearly so, oblong, rounded, 10 to 12 mm long, 4 mm wide, below glabrous, the upper part on the back very densely and uniformly pubescent with short brownish hairs. Staminal-tube cylindric, glabrous, free, 10 to 11 mm long, cleft into 8, small, oblong, 2 mm long lobes, the lobes rounded-truncate and obscurely retuse, the 1 mm long anthers alternate with the lobes. Disk cylindric, glabrous, truncate, 3 mm long, free. Ovary free, densely pubescent, 4-celled, the lower part of the style densely hirsute, the upper part glabrous.

AMBOINA, Lateri, *Rel. Robins. 1994*, September 5, 1913, in forests, altitude about 175 meters, locally known as *daun lansa utan*, and *tauwan*.

A strongly marked species, well characterized by its long leaves, numerous subsessile leaflets, and its cauline, fascicled, simple, many-flowered racemes. It belongs in the group with *Dysoxylum ramiflorum* Miq., *D. cautostachyum* Miq., and allied forms, but is apparently distinct from all described species.

DYSOXYLUM DECANDRUM (Blanco) Merr. in Govt. Lab. Publ. (Philip.) 27 (1905) 39.

Turraea decandra Blanco Fl. Filip. (1837) 347.
Dysoxylum amooroides Miq. in Ann. Mus. Bot. Lugd. Bat. 4 (1868) 16.

AMBOINA, Batoe merah, *Pl. Rumph. Amb. 1989*, August 24, 1913, in ravines, altitude about 150 meters.

The specimen is in fruit, and appears to be the form of this widely distributed species indicated by Koorders & Valeton as var. *pubescens* K. & V. I cannot distinguish the common Philippine form, *Dysoxylum decandrum* (Blanco) Merr., from *D. amooroides* Miq. and have accordingly reduced the latter.

Luzon to Java and New Guinea.

CHISOCHITON Blume

CHISOCHITON sp.

AMBOINA, Hitoe lama, *Rel. Robins, 1995,* October 11, 1913, in forests, altitude about 150 meters.

The specimen presents only immature fruits, and is hence not further determinable except by comparison with authentically named specimens. It appears to have indehiscent fruits and to belong with that group of species placed by C. DeCandolle in the genus *Dasycoleum.*

AGLAIA Loureiro

AGLAIA MULTIFOLIOLA Merr. in Philip. Journ. Sci. 9 (1914) Bot. 534.

AMBOINA, Hitoe messen, *Rel. Robins. 1990,* October 8, 1913, in forests, altitude about 150 meters.

The specimen closely matches the type of the species, which is closely allied to *Aglaia argentea* Blume. The only other localities known for *Aglaia multiflora* are Basilan and southwestern Mindanao, in the Philippines.

AGLAIA MIQUELII nom. nov.

Aglaiopsis glaucescens Miq. Ann. Mus. Bot. Lugd. Bat. 4 (1868) 59, non *Aglaia glaucescens* King.

Hearnia glaucescens C. DC. Monog. Phan. 1 (1878) 631.

AMBOINA, Batoe merah, *Rel. Robins. 1992,* August 24, 1913, in ravines, altitudes about 200 meters; Amahoesoe, *Rel. Robins. 1993,* September 16, 1913, in light forest, altitude about 70 meters.

Reported by Miquel from various parts of the Moluccas and from New Guinea, but the New Guinea specimens have been referred by C. DeCandolle to *Aglaia novoguineensis* C. DC. in Bull. Herb. Boiss. II 3 (1903) 173. The specimens differ slightly from the species, as described, but I still consider them referable here. Miquel's specific name *glaucescens* is invalidated in *Aglaia* by *Aglaia glaucescens* King, hence the new one proposed above.

AGLAIA sp.

AMBOINA, Hitoe lama, *Rel. Robins. 1991,* November 1, 1913, on limestone formations in forests, altitude about 150 meters, locally known as *lolan puti* and *lansa utan.*

The specimen represents a very characteristic species with a greatly reduced inflorescence, but the flowers are too young to warrant further identification of the specimens at this time.

MALPIGHIACEAE

RYSSOPTERIS Blume

RYSSOPTERIS TIMORIENSIS (DC.) Blume ex A. Juss. in Deless. Ic. Sel. 3 (1837) 21.

Banisteria timoriensis DC. Prodr. 1 (1824) 588.

AMBOINA, Hitoe messen, *Rel. Robins. 2007,* November 1, 1913, on trees at an altitude of about 150 meters.

Definitely reported from Java and Timor.

POLYGALACEAE

EPIRIXANTHES Blume

EPIRIXANTHES ELONGATA Blume Cat. (1825) 82.

AMBOINA, Hatiwe, *Rel. Robins. 1666*, September 15, 1913, altitude about 300 meters.

Previously known from the Malay Peninsula, Borneo, Sumatra, and Java. The generic name is variously spelled *Epirhizanthes*, *Epirhizanthus*, *Epirhizanthe*, and finally *Epirrhizanthes*, the last adopted by Penzig, in Ann. Jard. Bot. Buitenz. 17 (1901) 146, as the philologically correct form. The original spelling, as proposed by Blume, is here retained.

SALOMONIA Loureiro

SALOMONIA CANTONIENSIS Lour. Fl. Cochinch. (1790) 14.

AMBOINA, Batoe mera, *Rel. Robins, 1665*, July 18, 1913, in rocky soil, altitude 15 to 25 meters, locally known as *daun alus bunga*.

Widely distributed in tropical Asia and Malaya.

POLYGALA Linnaeus

POLYGALA POLIFOLIA Presl Rel. Haenk. 2 (1835) 101.

Polygala warburgii Chod. ex Warb. in Engl. Bot. Jahrb. 13 (1891) 346.

AMBOINA, Soja road, *Rel. Robins. 152*, August 1, 1913, hillsides, altitude 150 to 250 meters.

Previously known only from the Philippines, Carolines, and New Guinea. The type of Presl's species was from Luzon, not from Brazil as indicated in Index Kewensis, and *Polygala warburgii* Chod. is identical with it.

EUPHORBIACEAE

PHYLLANTHUS Linnaeus

PHYLLANTHUS RETICULATUS Poir. in Lam. Encycl. 5 (1804) 298.

BALI, Boeleleng, *Rel. Robins. 2520*, July 7, 1913.

Tropical Africa, Asia, and Malaya.

PHYLLANTHUS sp.

AMBOINA, Eri, *Rel. Robins. 1704*, August 30, 1913.

An undershrub about 0.3 m high, representing a characteristic, perhaps undescribed species, but unfortunately our material presents only pistillate flowers. It represents a species allied to the Philippine *Phyllanthus lancifolius* Merr. and *P. macgregorii* C. B. Rob., but is distinct from both.

GLOCHIDION Forster

GLOCHIDION BREYNIOIDES C. B. Rob. in Philip. Journ. Sci. 4 (1909) Bot. 95.

AMBOINA, Koesoekoesoe sereh, *Rel. Robins. 1712*, October 3, 1913, in light woods, altitude about 225 meters.

The Amboina specimen differs from the type of the species in its somewhat larger leaves and larger staminate flowers but is apparently a form

of *Glochidion breynioides* C. B. Rob. The species is widely distributed in the Philippines and is also found in Borneo.

GLOCHIDION MOLLE Blume Bijdr. (1825) 586.

AMBOINA, Hitoe lama, *Rel. Robins. 1711*, November 5, 1913, along roadsides, altitude about 50 meters.

Java to southern Mindanao and Celebes.

GLOCHIDION GLABRUM J. J. Sm. in Lorenz Nova Guinea 8 (1910) 224, *t. 53*.

AMBOINA, Soja road, *Rel. Robins. 1713*, on hillsides, altitude about 50 meters.

The specimen is in fruit, and is almost certainly referable to this recently described species.

SAUROPUS Blume

SAUROPUS ALBICANS (Linn.) Merr. in For. Bur. (Philip.) Bull. 1 (1903) 128.

Cluytia androgyna Linn. Mant. 1 (1767) 128.
Sauropus albicans Blume Bijdr. (1825) 596.

AMBOINA, *Rel. Robins. 1701*, July 22, 1913, in thickets and along the river back of the town of Amboina, locally known as *katok*.

India to southern China to Java, Amboina, and the Philippines.

BREYNIA Forster

BREYNIA PUBESCENS sp. nov.

Frutex circiter 1 m altus, ramulis subtus foliis calycibusque uniformiter subdense tomentosis; foliis submembranaceis, in siccitate nigris, usque ad 4.5 cm longis, ovatis ad oblongo-ovatis, basi acutis ad rotundatis, apice acutis, minutissime apiculatis, nervis utrinque 5 vel 6; calycis valde accrescentibus, subcupularis, obscure lobatis, circiter 6 mm diametro.

A shrub about 1 m high, the branches and branchlets terete, the former pale-brownish, glabrous, the latter slender, nearly black when dry, uniformly and rather densely villous. Leaves ovate to oblong-ovate, submembranaceous, 2.5 to 4.5 cm long, 2 to 3 cm wide, the upper surface nearly glabrous and black when dry, the lower much paler, uniformly villous with somewhat grayish, short, somewhat crisped hairs, the base acute to rounded, the apex acute and minutely apiculate; lateral nerves 5 or 6 on each side of the midrib, slender; petioles pubescent, about 2 mm long. Flowers axillary, solitary, very shortly pedicelled. Fruits green, subglobose, glabrous, black when dry, about 5 mm in diameter, almost surrounded by the cup-shaped, accrescent, obscurely lobed, somewhat pubescent calyx, which is about 6 mm in diameter, black when dry, red when fresh.

AMBOINA, Batoe gadjah, *Rel. Robins. 1694*, August 5, 1913, on open hillsides, altitude 50 to 200 meters.

In aspect this species resembles *Breynia cernua* Muell.-Arg., to which it is manifestly allied, from which it is easily distinguished, however, by the prominent indumentum on its branchlets, leaves, and calyces. In its indumentum it approaches *Breynia ovalifolia* J. J. Sm., of New Guinea, but is not closely allied to that species, differing in its much larger, differently shaped, more numerously nerved leaves, and its cup-shaped accrescent calyx.

APOROSA Blume

APOROSA SPHAERIDOPHORA Merr. in Philip. Journ. Sci. 1 (1906) Suppl. 76.

AMBOINA, Hitoe lama and Lateri, *Rel. Robins. 1714, 1715, 1716,* August, September, and October, 1913, in forests, altitude 100 to 200 meters, locally known as *makarlasi* and *simbun api.*

One of the specimens has pistillate flowers, one very young fruits, and one mature or nearly mature fruits. While they are not absolutely identical with the type material of *Aporosa sphaeridophora* Merr. I can detect no constant differences which would warrant me in separating the Amboina form from the Philippine one.

Widely distributed in the Philippines and also known from Java.

ANTIDESMA Burman

ANTIDESMA GHAESEMBILLA Gaertn. Fruct. 1 (1788) 189, *t. 39,* excl. syn.

AMBOINA, Soja road and vicinity of the town of Amboina, *Rel. Robins. 1710,* August and October, 1913, on stony and grassy hillsides, altitude 35 to 200 meters, locally known as *melur utan.*

India through Malaya to tropical Australia.

MALLOTUS Loureiro

MALLOTUS PANICULATUS (Lam.) Muell.-Arg. in Linnaea 34 (1865) 189.

Croton paniculatus Lam. Encycl. 2 (1786) 207.
Mallotus cochinchinensis Lour. F. Cochinch. (1790) 635.

AMBOINA, Hoetoemoeri road, *Rel. Robins. 1723,* September 30, 1913, along roadsides, altitude about 150 meters, locally known as *haleky ewan.*

Burma to southern China and Formosa, southward to tropical Australia.

MALLOTUS COLUMNARIS Warb. in Engl. Bot. Jahrb. 13 (1891) 349.

AMBOINA, Amahoesoe, *Rel. Robins. 1719, 1720,* August, 1913, on coral limestone at low altitudes, locally known as *haleky karang.*

Amboina and the Key and Aru Islands.

HOMONOIA Loureiro

HOMONOIA JAVENSIS (Blume) Muell.-Arg. in Linnaea 34 (1865) 200.

Spathiostemon javense Blume Bijdr. (1825) 622.
Mallotus eglandulosus Elm. Leafl. Philip. Bot. 1 (1898) 313.

AMBOINA, Ayer putri, Mahija, and Halong, *Rel. Robins. 1717, 1718,* July to September, 1913, on coral limestone, river banks, etc.; altitude, sea level to 300 meters, locally known as *pita hatu.*

Luzon to Java and New Guinea.

MACARANGA Thouars

MACARANGA ROBINSONII sp. nov. § *Inermes.*

Arbor glabra circiter 8 m alta; foliis chartaceis, oblongis, integris, usque ad 16 cm longis, acuminatis, basi acutis vel obtusis, in pagina superiore 2-glandulosis, subtus eglandulosis, costa ciliata, nervis utrinque circiter 11, prominentibus, petiolo 2.5 ad 5.5 cm longo; paniculis ♀ axillaribus, tenuibus, ut videtur paucifloris, usque ad 10 cm longis, bracteis minutis, lanceolatis, integris, eglandulosis; fructibus glabris, inermis, globosis, 4 mm diametro, 1-locellatis.

A glabrous tree about 7 m high. Branches and branchlets slender, terete, reddish-brown, glabrous, or the very young parts at the tip somewhat furfuraceous-lepidote. Leaves alternate, oblong, chartaceous, 10 to 16 cm long, entire, penninerved, olivaceous and somewhat shining when dry, the lower surface ciliate on the midrib, otherwise glabrous, apex slenderly acuminate, base acute to blunt, rather prominently 2-glandular on the upper surface near the insertion of the petiole, the lower surface a little paler then the upper, shining, not at all glandular; lateral nerves about 11 on each side of the midrib, slender, prominent, curved-ascending, anastomosing; petioles 2.5 to 5.5 cm long. Pistillate panicles axillary, slender, apparently few-flowered, up to 10 cm long, the bracts lanceolate, acuminate, entire, eglandular, about 1.5 mm long, the pedicels slender, about 5 mm long. Capsules globose, 5 mm in diameter, 1-celled, 1-seeded, dehiscent, glabrous or obscurely glandular.

AMBOINA, Hitoe messen, *Rel. Robins. 1721*, November 5, 1913, in forests, altitude about 125 meters.

A characteristic species apparently belonging in the section *Inermes* Pax & Hoffm., the three species placed here being from the Philippines and New Guinea. Of the three known species it is most closely allied to *Macaranga inermis* Pax & K. Hoffm. of New Guinea, from which it is distinguished by numerous characters, notably its differently shaped, narrower, prominently acuminate leaves, which are not glandular beneath, and its glabrous capsules.

MACARANGA sp.

AMBOINA, Way uri, *Rel. Robins. 1722*, September 9, 1913, on cliffs along rivers, altitude about 40 meters; locally known as *picha piring puti.*

A characteristic species apparently belonging in the same group with, and allied to, *Macaranga leytensis* Merr. Unfortunately the specimen is very immature; the inflorescence is well formed, but not sufficiently developed to determine whether the plant is a pistillate or a staminate one.

ACALYPHA Linnaeus

ACALYPHA WILKESIANA Muell.-Arg. in DC. Prodr. 16[1] (1866) 817.

Acalypha tricolor Seem. Fl. Vit. (1865–68) 225.

AMBOINA, *Rel. Robins. 1707, 1708,* September, 1913, from cultivated plants, town of Amboina, locally known as *ekor kuching.*

A native of Polynesia, now widely cultivated in many tropical countries.

ACALYPHA INDICA Linn. Sp. Pl. (1753) 1003.

BALI, Boeleleng, *Rel. Robins. 2525,* July 7, 1913.

Widely distributed in the tropics of the Old World.

ALCHORNEA Swartz

ALCHORNEA RUGOSA (Lour.) Muell.-Arg. in Linnaea 34 (1865) 170.

Cladodes rugosa Lour. Fl. Cochinch. (1790) 704.

Alchornea javensis Muell.-Arg. in Linnaea 34 (1865) 170.

AMBOINA, Lateri, *Rel. Robins. 1702,* August 25, 1913, in forests, altitude about 150 meters, locally known as *pita hatu.*

Burma through Malaya and the Philippines to New Guinea.

EXCOECARIA Linnaeus

EXCOECARIA BICOLOR Hassk. Retzia 1 (1855) 158, var. **VIRIDIS** Pax & K. Hoffm. in Engl. Pflanzenreich 52 (1912) 159.

AMBOINA, Hitoe messen, *Rel. Robins. 1703,* October 10, 1913, on forested limestone hills, altitude about 150 meters.

Java to the Moluccas, the form with leaves reddish or purple beneath cultivated for ornamental purposes; the variety *viridis* Pax & K. Hoffm. in Cochin-China.

EUPHORBIA Linnaeus

EUPHORBIA ATOTO Forst. f. Prodr. (1786) 36.

AMBOINA, Paso, *Rel. Robins. 1705,* October 29, 1913, along the seashore.

Tropical sandy seashores, India to southern China through Malaya to tropical Australia and Polynesia.

EUPHORBIA PROSTRATA Ait. Hort. Kew. 2 (1789) 139.

BALI, Boeleleng, *Rel. Robins. 2530,* July 7, 1913.

Widely distributed in the tropics of both hemispheres.

EUPHORBIA THYMIFOLIA Linn. Sp. Pl. (1753) 454.

AMBOINA, Paso, *Rel. Robins. 1706,* October 31, 1913, along streets.

Widely distributed in the tropics of both hemispheres.

ANACARDIACEAE

BUCHANANIA Roxburgh

BUCHANANIA AMBOINENSIS Miq. Ann. Mus. Bot. Lugd. Bat. 4 (1868) 117.

AMBOINA, Negri lama, *Rel. Robins. 1777,* September 8, 1913, on river banks, altitude about 30 meters; Hitoe messen *Rel. Robins. 1776,* October

3, 1913, in forests, altitude about 200 meters, locally known as *hutong utan*.

Known only from Amboina.

HIPPOCRATEACEAE

SALACIA Linnaeus

SALACIA PRINOIDES (Willd.) DC. Prodr. 1 (1824) 571.

Tontelea prinoides Willd. in Ges. Naturf. Fr. Neue Schr. 4 (1803) 184.

AMBOINA, Paso, *Rel. Robins. 2004*, October 31, 1913, climbing over trees on the seashore.

India to the Malay Archipelago and the Philippines. The Amboina specimen, cited above, is apparently this species, at least as currently interpreted.

STACKHOUSIACEAE

STACKHOUSIA Smith

STACKHOUSIA INTERMEDIA F. M. Bailey in Queensl. Agr. Journ. 3: 281, forma **PHILIPPINENSIS** Pamp. in Bull. Herb. Boiss. II 5 (1905) 1150.

AMBOINA, Soja road, *Rel. Robins. 1766*, August 1, 1913, on grassy dry hillsides, altitude about 300 meters.

The discovery of this species in Amboina, a characteristic Australian type, is of some interest. Doctor Robinson had previously collected it in Guimaras Island, Philippines, and wrote regarding the discovery of it in Amboina, that on the first of August he located a region that strongly resembled the place in Guimaras where he had found *Stackhousia* and deliberately commenced a search for the plant, succeeding in finding it in quantity. It is inconspicuous, slender, and grows among grasses, which perhaps explains why it has not been discovered more frequently. It is known from northern Luzon and from Guimaras Island in the Philippines, from Yap Island in the Carolines, from Amboina, and from northeastern Australia, with a closely allied or identical form in Sumatra.

SAPINDACEAE

GUIOA Cavanilles

GUIOA sp.

AMBOINA, Gelala, *Rel. Robins. 1602*, September 19, 1913, on rocky hillsides at an altitude of about 125 meters.

This is indicated by Doctor Radolkofer as an undescribed species, but a diagnosis of it is not at present available.

RHAMNACEAE

ALPHITONIA Reissek

ALPHITONIA ZIZYPHOIDES (Spr.) A. Gray Bot. Wilkes U. S. Explor. Exped. (1854) 278.

Rhamnus zizyphoides Spr. Fl. Hal. Mant. (1807) 37, Syst. 1 (1825) 768.

Alphitonia excelsa Reiss. in Endl. Gen. Pl. (1840) 1098.

Alphitonia moluccana Teysm. & Binn. Cat. Hort. Bogor. (1866) 221.

AMBOINA, Hatiwe, *Rel. Robins. 1773*, September 15, 1915, on hillsides, altitude about 150 meters locally known as *sapar*.

Borneo and the Philippines to northeastern Australia and Polynesia.

ZIZYPHUS Linnaeus

ZIZYPHUS HORSFIELDII Miq. Fl. Ind. Bat. 1[1] (1856) 643 ?

AMBOINA, Hitoe messen, *Rel. Robins. 1774*, November 1, 1913, climbing over trees at an altitude of about 100 meters.

The identification has been made with Miquel's species from the published description alone, the specimens agreeing fairly well with the characters assigned to it by him. The specimen presents only immature fruits, so that the identification cannot be considered certain; Miquel's species has been reported from Sumatra and Java. The Amboina specimen rather closely resembles the Philippine *Zizyphus crebrivenosa* C. B. Rob., but differs in its pubescent fruits and in its much less prominent transverse nerves which are reticulate-interrupted, not straight and continuous as in Robinson's species.

VENTILAGO Gaertner

VENTILAGO FASCICULIFLORA sp. nov.

Frutex scandens, ramulis junioribus floribusque leviter ciliato-hirsutis exceptis glaber; foliis chartaceis, oblongo-ovatis in siccitate pallidis, nitidis, usque ad 11 cm longis, acuminatis, distanter glanduloso-denticulatis, nervis utrinque circiter 5; floribus fasciculatis, axillaribus, pedicellatis, pedicellis calycibusque ciliato-hirsutis, petalis latissime obovatis, late retusis, lobis patulis, rotundatis.

A scandent shrub, the young branchlets, pedicels, and calyces more or less ciliate-hirsute, the hairs on the branchlets subappressed, those on the pedicels and calyces spreading. Branches very slender, terete, smooth, dark reddish-brown, the younger ones greenish. Leaves oblong-ovate, chartaceous, pale and shining when dry, 7 to 11 cm long, 3.5 to 5 cm wide, apex rather prominently acuminate, the acumen rather broad, apiculate, base subacute to somewhat rounded, somewhat inequilateral, margins distantly and minutely glandular-denticulate; lateral nerves about 5 on each side of the midrib, slender, curved-ascending, distinct, the reticulations close, fine; petioles 3 to 4 mm long, glabrous. Flowers yellowish-green, about 3 mm in diameter, all in axillary fascicles, 8 to 12 flowers in a fascicle, their rather prominently ciliate-hirsute pedicels 3 to 4 mm in length. Calyx-segments triangular-ovate, acute, 1.5 mm long, externally ciliate-hirsute with scattered hairs. Petals glabrous, broadly obovate, base narrowed, apex broadly retuse, the lobes spreading, rounded, the petals wider at the apex than long. Stamens glabrous, about 1.3 mm long. Ovary glabrous; styles 2, short. Fruit not seen.

AMBOINA, Paso, *Rel. Robins. 1818*, October 31, 1913, in thickets near the beach.

A species well characterized by its axillary fascicled flowers, the fascicles constantly solitary, never arranged in racemes as in most of the other species of the genus.

VITACEAE

LEEA Royen

LEEA sp.

AMBOINA, Hitoe lama, Mahija, and Hitoe messen, *Rel. Robins. 1879, 2044*, August and November, 1913, on forested limestone hills, altitude 150 to 225 meters, locally known as *tatahel ayer* and *tatahel ayoo*.

A robust species, 6 to 8 m high, with large compound leaves and ample leaflets, the larger leaflets up to 30 cm in length. It closely resembles the Philippine *Leea negrosensis* Elm., but further identification of the specimens is not possible except by comparison with authentically named specimens, as they are in fruit only.

TILIACEAE

GREWIA Linnaeus

GREWIA ACUMINATA Juss. in Ann. Mus. Paris 4 (1805) 91, *t. 48, f. 2.*

Grewia pedicellata Roxb. Hort. Beng. (1814) 43, *nomen nudum*, Fl. Ind. ed. 2, 2 (1832) 585.

Grewia umbellata Roxb. l. cc. 42, 591.

AMBOINA, Eri, *Rel. Robins. 1807*, September 22, 1913, in thickets near the strand.

This is a topotype of *Grewia pedicellata* Roxb., and agrees with the short original description of that species. It also agrees with the original description and figure of the older *Grewia acuminata* Juss., to which Hochreutiner has reduced *Grewia umbellata* Roxb. It is to be noted, however, that King, Journ. As. Soc. Beng 60[2] (1891) 109, retains *Grewia umbellata* Roxb. as a distinct species, limiting it to the Malay Peninsula (it was originally described from Sumatran material), and does not consider it to be identical with the Amboinese *Grewia pedicellata* Roxb. Abundant material available here from various parts of the Malay Archipelago and the Philippines leads me to suspect that *Grewia acuminata, G. pedicellata* Roxb., and *G. umbellata* Roxb. are all forms of the same species.

GREWIA CERAMENSIS Boerl. ex Hochr. Pl. Bogor. Exsicc. (1904) 30.

AMBOINA, Waë, *Rel. Robins. 1805*, in light forests, altitude about 20 meters; locally known as *sokolat utan*, that is, wild chocolate.

Previously known only from Ceram, and from specimens cultivated in the botanic garden at Buitenzorg, Java.

TRICHOSPERMUM Blume

TRICHOSPERMUM QUADRIVALVE sp. nov.

Arbor parva, ramulis petiolisque dense ferrugineo stellato-pubescentibus; foliis subcoriaceis, oblongo-ovatis, usque ad 24 cm longis, supra parce, subtus densissime pallide stellato-pubescentibus, acuminatis, basi profunde cordatis, aequilateralibus vel

leviter inaequilateralibus, nervis utrinque 7 vel 8, prominentibus, margine serrato-crenulatis; inflorescentiis axillaribus, subcorymbosis, circiter 8 cm longis; floribus 5-meris; fructibus circiter 8 mm longis, obovoideis, 4-angulatis, 4-valvis, extus dense ciliatis.

A small tree about 7 m high, the branches, branchlets, lower surface of the leaves, and the inflorescence prominently and for the most part densely stellate-pubescent. Branches terete, densely puberulent, the indumentum on the ultimate branchlets and petioles ferruginous. Leaves subcoriaceous, oblong-ovate, equilateral or slightly inequilateral at the base, 16 to 24 cm long, 6 to 12 cm wide, the upper surface rather dark-olivaceous when dry, densely stellate-pubescent with pale hairs on the midrib and nerves and with short scattered hairs on the reticulations and surface, the lower surface densely and uniformly stellate-pubescent with short hairs, the lower surface pale-gray in color, base prominently cordate, the lobes broad, rounded, sinus rather narrow, apex acuminate, margins rather closely serrate-crenulate; lateral nerves 7 or 8 on each side of the midrib, prominent, the primary reticulations subparallel, prominent, the base with two pairs of nerves, the lower and outer pair much shorter than the inner ones; petioles 1.5 to 2 cm long. Inflorescence axillary, solitary, in fruit up to 8 cm long, densely stellate-puberulent or pubescent with grayish-olivaceous hairs, paniculate. Flowers 5-merous. Sepals lanceolate, thick, blunt, 5 to 5.5 mm long, outside densely stellate-puberulent with grayish hairs, inside very sparingly pubescent. Petals oblong-spatulate, about 4 mm long, glabrous except at the ciliate base, rounded, membranaceous. Capsules obovoid, about 8 mm long, 4-angled, 4-valved, 4-celled, apiculate, the valves externally densely ciliate with rather soft, subappressed, shining, rather pale hairs. Seeds ovoid, inequilateral, subacute, about 1.2 mm long, rather densely covered with long, soft, copious, white or pale hairs which are attached near the base and along the inner angles.

AMBOINA, near the town of Amboina, *Rel. Robins. 1808*, in ravines, altitude about 50 meters, October 27, 1913, locally known as *morong puti*.

The alliance of this species is manifestly with the Philippine *Trichospermum trivalve* Merr., from which, however, it differs in many characters, notably in its pale indumentum on the lower surface of the leaves, its equilateral or nearly equilateral leaves, and its 4-valved, 4-celled capsules.

Doctor Robinson has suggested on the field label that it may possibly be *Restiaria nigra* Rumph., Herb. Amb. 3: 188, which I have placed under *Columbia suboborata* Hochr., and there are certain points in Rumphius's description that favor this disposition of *Restiaria nigra*. However, the fruit and especially the seed characters indicated by Rumphius certainly do not apply to *Trichospermum*. Continued field work in Amboina may

throw additional light on the exact status of *Restiaria nigra*, but from the evidence and data at present available it seems best to consider it under *Columbia subobovata* Hochr.

TRIUMFETTA Linnaeus

TRIUMFETTA REPENS (Blume) Merr. & Rolfe in Philip. Journ. Sci. 3 (1908) 111.

Porpa repens Blume Bijdr. (1825) 198.

Triumfetta radicans Boj. in Ann. Sci. Nat. II 20 (1843) 103; Gagnep. in Not. Syst. 1 (1910) 172.

Triumfetta subpalmata Soland. ex Hemsl. in Journ. Bot. 28 (1890) 2, *t. 293, f. l.*

AMBOINA, Hitoe lama, *Rel. Robins. 1806*, November 5, 1913, on sandy beaches.

Madagascar, the Seychelles, Borneo, Java, the Philippines, Keeling Islands, small islands in the Gulf of Siam, and those off the northeastern coast of Australia.

MALVACEAE

HIBISCUS Linnaeus

HIBISCUS VITIFOLIUS Linn. Sp. Pl. (1753) 696.

BOETON, Baoe baoe, *Rel. Robins. 2478*, July 23, 1913.

India and Ceylon to tropical Australia.

HIBISCUS SCHIZOPETALUS Hook. f. in Curt. Bot. Mag. *t. 6524.*

AMBOINA, cultivated, *Rel. Robins. 2006*, August 9, 1913.

A native of tropical Africa, now cultivated in most tropical countries.

SIDA Linnaeus

SIDA JAVENSIS Cav. Diss. 5 (1788) 10, *t. 134, f. 2.*

BOETON, Baoe baoe, *Rel. Robins. 2482*, July 13, 1913. BALI, Boeleleng, *Rel. Robins, 2517*, July 7, 1913.

Widely distributed in the tropics of the Old World.

SIDA CORYLIFOLIA Wall. Cat. (1829) no. 1865.

BOETON, Baoe baoe, *Rel. Robins. 2479*, July 13, 1913.

Burma, Indo-China, the Philippines, Java, and Madura.

SIDA RHOMBIFOLIA Linn. Sp. Pl. (1753) 684.

AMBOINA, Lateri, *Rel. Robins. 1695*, August, 1913, along roadsides. BALI, Boeleleng, *Rel. Robins. 2438*, July 7, 1913.

Tropics of the World.

STERCULIACEAE

MELOCHIA Linnaeus

MELOCHIA CONCATENATA Linn. Sp. Pl. (1753) 675.

Melochia corchorifolia Linn. l. c.

AMBOINA, Batoe gadjah, *Rel Robins. 1764*, August 1, 1913, in open grassy places, altitude about 50 meters.

The Linnean specific name *concatenata* has page priority over *corchorifolia*, the latter, however, being the universally used name for this common

and widely distributed species. *Melochia concatenata* Linn. was primarily based on *Fl. Zeyl. 247*, the actual specimen being identical with *Melochia corchorifolia* Linn.

Common and widely distributed in all tropical countries.

MELOCHIA PYRAMIDATA Linn. Sp. Pl. (1753) 674.

BOETON, Baoe baoe, *Rel. Robins. 2494*, July 13, 1913.

A native of tropical America, now widely distributed in the tropics of both hemispheres.

DILLENIACEAE

SAURAUIA Willdenow

SAURAUIA TRISTYLA DC. in Mém. Soc. Phys. Genév. 1 (1822) 433, *t. 7.*

AMBOINA, Lateri, *Rel. Robins. 1857*, September 5, 1913, in thin forests, altitude about 20 meters; Batoe merah River, *Rel. Robins. 1856*, September 24, 1913, on cliffs near the river, altitude about 50 meters.

Originally described from Amboina and known only from this island.

OCHNACEAE

SCHUURMANSIA Blume

SCHUURMANSIA ELEGANS Blume Mus. Bot. Lugd. Bat. 1 (1850) 177, *f. 32.*

AMBOINA, Hatalai, *Rel. Robins. 2036*, October 24, 1913, in light forest at an altitude of about 325 meters.

The type of the species was from Amboina, and Hallier[*] also reports it from Celebes. Doctor Robinson has suggested on the field label that it may possibly be the plant described by Rumphius as *Ligum muscosum*, Herb. Amb. 3: 203, but Rumphius's description of the inflorescence, flowers, and fruits certainly does not apply to *Schuurmansia*. The genus extends from Luzon to New Guinea, comprising nine species—two in Luzon; two in Amboina, of which one extends to Celebes; one in Ternate and Halmaheira; and four in New Guinea. The Bornean *Schuurmansia angustifolia* Hook. f., has been made the type of a distinct genus, *Schuurmansiella*, by Hallier.

THEACEAE

EURYA Thunberg

EURYA TRICHOCARPA Korth. Verh. Nat. Gesch. Bot. (1839–42) 114, *nomen nudum;* Blume Fl. Ind. Bat. 2 (1856) 115.

AMBOINA, Hatiwe, *Rel. Robins. 1804*, September 15, 1913, in thickets, altitude about 250 meters, locally known as *rumput bulu.*

This species was described from Amboina material, and the specimen cited above agrees closely with the description so far as it is comparable; the flowers are young, and no fruits are present. It closely resembles the polymorphous species known as *Eurya acuminata* DC., and doubtless would be included in that species as interpreted by Dyer in Hook. f. Fl. Brit. Ind. 1 (1874) 285. The short-apiculate sepals are, however, characteristic, while the fruit is described by Blume as somewhat pubescent.

[*] Recuiel Trav. Bot. Néerl. 10 (1913) 346.

EURYA NITIDA Korth. Verh. Nat. Gesch. Bot. (1839–42) 115, *t. 17, f. 1–2.*

AMBOINA, Hitoe messen, *Rel. Robins. 1803*, October 18, 1913, in forests, altitude about 475 meters.

The specimen agrees quite closely with the description and with numerous specimens of what is supposed to be *Eurya nitida* Korth. from the Malay Peninsula and Java, except that the sepals are slightly apiculate. A critical revision of the genus may show that the specimen cited above is really distinct. It has been sunk in *Eurya japonica* Thunb. by some botanists, and by Dyer, in Hook. f. Fl. Brit. Ind. 1 (1874) 284, it is treated as *Eurya japonica* Thunb. var. *nitida* (Korth.) Dyer.

GUTTIFERAE

GARCINIA Linnaeus

GARCINIA sp.

AMBOINA, Hitoe lama, *Rel. Robins. 1781*, November 6, 1913, in forests, altitude about 75 meters, locally known as *mangostan utan.*

The specimen has young flowers and is scarcely in condition for accurate identification. It very strongly resembles *Garcinia dulcis* Kurz, but the branchets and branches are terete, not at all angled, while the leaves have numerous scattered glands on the lower surface distinctly visible to the naked eye. Perhaps an undescribed species.

VIOLACEAE

RINOREA Aublet

RINOREA AMBOINENSIS sp. nov. § *Prothesia.*

Frutex circiter 1.5 m altus, ramulis junioribus inflorescentiisque leviter adpresse pubescentibus exceptis glaber; foliis chartaceis, oblongis ad oblongo-ellipticis, integris, usque ad 33 cm longis, nervis utrinque circiter 16, prominentibus, apice longissime acuminatis, basi leviter inaequilateralibus, acutis ad subrotundatis et leviter decurrento-acuminatis; cymis axillaribus, circiter 2 cm longis, paucifloris, sepalis oblongo-ovatis, circiter 3.5 mm longis, acutis; staminibus inclusis, liberis, appendicis late ovatis; ovario hirsuto.

A shrub about 1.5 m high, glabrous except the slightly pubescent branchlets and the appressed-pubescent inflorescences. Branches terete, brownish, glabrous, the branchlets minutely puberulent. Leaves oblong to oblong-elliptic, entire, chartaceous, shining, pale-olivaceous when dry, up to 33 cm long and 12 cm wide, gradually narrowed above to the long-acuminate apex, the acumen stout, acute or apiculate, base slightly inequilateral, acute to somewhat rounded and more or less decurrent-acuminate; lateral nerves about 16 on each side of the midrib, prominent, the reticulations subparallel, distinct; petioles 1.5 to 2 cm long. Cymes axillary, appressed-pubescent, about 2

cm long, rather few-flowered, the pedicels 3 to 5 mm long. Sepals oblong-ovate, acute, sparingly appressed-pubescent, about 3.5 mm long. Petals oblong, narrowed to the base and to the acute apex, at anthesis about as long as the sepals, slightly accrescent, glabrous, or the exposed median portion of the back slightly appressed-pubescent. Stamens free, about 2 mm long, the filaments very short, the appendages to the connectives brown, broadly ovate, acute or subacute, 1 mm long. Ovary densely pale-hirsute; style slender, glabrous, about 1.7 mm long.

AMBOINA, Hoetoemoeri road, *Rel. Robins. 1669*, September 30, 1913, on forested hillsides, altitude about 250 meters.

A species similar, and manifestly very closely allied, to the Philippine species *Rinorea acuminata* Merr., from which it is distinguished by its puberulent, not villous branchlets; its differently shaped, less pubescent sepals; and acute or subacute, ovate connective-appendages.

FLACOURTIACEAE

FLACOURTIA L' Héritier

FLACOURTIA INERMIS Roxb. Hort. Beng. (1814) 73, *nomen nudum*, Fl. Ind. ed. 2, 3 (1832) 833.

AMBOINA, Ayer putri, and near the town of Amboina, *Rel. Robins. 1726*, July, 1913, with flowers and mature fruits, locally known as *tomi tomi*.

Roxburgh's species was based on specimens cultivated in the botanical garden at Calcutta, originating in the Moluccas, probably, or at least possibly, from Amboina. The specimen cited above agrees with the original description in all respects and with specimens from cultivated plants in the botanical garden at Buitenzorg, Java, one of which came from the Calcutta garden. It somewhat resembles *Flacourtia rukam* Z. & M., but is distinguished by having perfect flowers.

CASEARIA Jaoquin

CASEARIA GLABRA Roxb. Hort. Beng. (1814) 33, *nomen nudum*, Fl. Ind. ed. 2, 2 (1832) 421.

Casearia moluccana Blume Mus. Bot. 1 (1850) 255.

AMBOINA, Amahoesoe, Hitoe lama, and Batoe merah, *Rel. Robins. 1724*, August, 1914, in ravines and thin forests, altitude 10 to 50 meters; Koeda mati, *Rel. Robins. 1700*, September 3, 1913, in light woods, altitude 20 meters, locally known as *belu itam tuni*.

Both *Casearia glabra* Roxb. and *C. moluccana* Blume were described from Amboina material, or at least Roxburgh's material was from the Moluccas, probably from Amboina. It is possible that two distinct species are represented, and if *Casearia moluccana* Blume should prove to be distinct from the very inadequately described *Casearia glabra* Roxb., probably our specimens should go with Blume's name. The species is very closely allied to the Philippine *Casearia fuliginosa* Blanco, which, however, has distinctly pubescent sepals, the Amboina form having quite glabrous sepals.

PASSIFLORACEAE

PASSIFLORA Linnaeus

PASSIFLORA MOLUCCANA Blume Bijdr. (1826) 938, Rumphia 1 (1835) 169, *t. 15*.

AMBOINA Mahija, *Rel. Robins. 1659*, October 3, 1913, climbing over trees at an altitude of about 275 meters; Gelala, *Rel. Robins. 1661*, August 25, 1913, in thickets, altitude about 5 meters.

A species originally described from specimens collected in Ternate, and known from a few localities in the Moluccas.

PASSIFLORA FOETIDA Linn. Sp. Pl. (1753) 959.

AMBOINA, waste places on the beach near Castle Victoria, *Rel. Robins. 1660*, November 13, 1913, locally known as *pepinyo 'utan babulu*.

A native of tropical America, now introduced and naturalized in many other tropical countries.

BEGONIACEAE

BEGONIA Linnaeus

BEGONIA cf. *B. aptera* Blume Enum. Pl. Jav. (1827) 97.

AMBOINA, Kati-kati, *Rel. Robins. 1778*, October 7, 1913, on limestone rocks at an altitude of about 70 meters.

A coarse erect plant attaining a height of nearly 1 m, the stout stems about 1 cm in diameter when dry. It apparently belongs in the same group with the Philippine *Begonia pseudolateralis* Warb., but the material is inadequate to warrant a more definite determination of it, there being no fruits on the specimens.

BEGONIA sp.

AMBOINA, Koesoekoesoe sereh and Soja, *Rel. Robins. 2543*, August, 1913, terrestrial, rarely on rocks, altitude 200 to 400 meters.

BEGONIA sp.

AMBOINA, cultivated in the town of Amboina, *Rel Robins. 1779*, September 25, 1913, a single imperfect specimen inadequate for further identification.

THYMELAEACEAE

PHALERIA Jack

PHALERIA AMBOINENSIS sp. nov.

Frutex glaber, circiter 4 m altus; foliis firme chartaceis vel subcoriaceis, ellipticis ad late oblongo-ellipticis, petiolatis, usque ad 23 cm longis, obtusis vel brevissime lateque acuminatis, basi acutis, nervis primariis utrinque 12 ad 15; inflorescentiis terminalibus, pedunculatis, capitatis, pedunculis circiter 1 cm longis, fasciculatis; floribus numerosis, circiter 2.5 cm longis, extus glabris, laciniis intus puberulis.

A shrub about 4 m high, glabrous except portions of the inflorescence. Branches terete, stout, smooth, reddish-brown, the

ultimate branchlets similar in appearance but more or less compressed at the nodes. Leaves firmly chartaceous to subcoriaceous, elliptic to broadly elliptic-oblong, 15 to 23 cm long, 7 to 10 cm wide, base acute, apex obtuse to shortly and broadly blunt-acuminate, pale-olivaceous and shining when dry; primary lateral nerves 12 to 15 on each side of the midrib, irregular, distinct, anastomosing, the secondary nerves also rather prominent, reticulations lax; petioles stout, up to 1 cm in length. Inflorescence terminal, of few, fascicled, peduncled, rather many-flowered heads, the peduncles usually two or three at the apex of each branchlet, stout, up to 1 cm in length, each bearing 20 or more sessile flowers, the involucral bracts lanceolate to oblong, somewhat acuminate, 9 to 13 cm long, somewhat puberulent toward the apex. Flowers white, about 2.5 cm long, slender, the tube glabrous, the lobes rather densely puberulent inside. Ovary narrowly ovoid, rather densely appressed-hirsute in the upper part. Fruit broadly ovoid, very slightly compressed, subacute, 2-celled, about 12 mm long and wide, glabrous.

AMBOINA, Paso and Batoe merah River, *Rel. Robins. 1802*, September, 1913, in thickets and along the river, altitude 5 to 60 meters.

The genus *Phaleria* seems to be well developed in the Malay Archipelago, but from the material available for comparison and the published descriptions, I cannot definitely refer this Amboina plant to any previously described species.

LYTHRACEAE

ROTALA Linnaeus

ROTALA INDICA (Willd.) Koehne in Engl. Bot. Jahrb. 1 (1880) 172.

Peplis indica Willd. Sp. Pl. 2 (1799) 244.

CELEBES, Macassar, *Rel. Robins. 2456*, July 11, 1913.

India to China and Japan, the Philippines, Java, and Celebes.

AMMANNIA Linnaeus

AMMANNIA BACCIFERA Linn. Sp. Pl. (1753) 120.

CELEBES, Macassar, *Rel. Robins. 2462*, July 11, 1913. BALI, Boeleleng, *Rel. Robins. 2539*, July 7, 1913.

Tropical Asia and Malaya.

LECYTHIDACEAE

BARRINGTONIA Forster

BARRINGTONIA ACUMINATA Korth. in Nederl. Kruidk. Arch. 1 (1848) 206?

AMBOINA, Hoetoemoeri road, *Rel. Robins. 2012*, September 30, 1913, in forests, altitude about 350 meters.

The specimen presents imperfect flowers and no fruits, so that its identity with Korthal's species is somewhat doubtful. The type of the species was from Borneo, and the Amboina specimen agrees well with the

description so far as the specimen and the description are comparable. The same species, or a very closely allied one, is represented by *Foxworthy 129* from Sarawak, Borneo, and "V A 9" cultivated in the botanic garden at Buitenzorg, Java, from Amboina, under the name *Barringtonia rubra* Blume. It is characterized especially by its spicate inflorescence and long petioles.

RHIZOPHORACEAE

BRUGUIERA Lamarck

BRUGUIERA PARVIFLORA (Roxb.) W. & A. Prodr. (1834) 311.

Rhizophora parviflora Roxb. Fl. Ind. 2 (1824) 416, ed. 2, 2 (1832) 461.

AMBOINA, Ayer putri, *Rel. Robins. 1772*, July 28, 1913, along tidal streams.

Tidal forests, India to the Malay Archipelago. I cannot connect this characteristic and strongly marked species with any form described by Rumphius.

COMBRETACEAE

LUMNITZERA Willdenow

LUMNITZERA LITTOREA (Jack) Voigt Hort. Suburb. Calcut. (1756) 39.

Pyrrhanthus littoreus Jack in Malay Miscel. 2 (1822) 57.

Laguncularia purpurea Gaudich Bot. Freyc. Voy. (1826) 481, *t. 104*.

Lumnitzera pedicellata Presl Rel. Haenk. 2 (1831) 23.

Lumnitzera coccinea W. & A. Prodr. (1834) 316.

AMBOINA, Paso, *Rel. Robins. 1833*, October 31, 1913, along the beach.

Along the seashore, India to tropical Australia and Polynesia.

LUMNITZERA RACEMOSA Willd. in Ges. Natur. Fr. Neue Schr. 4 (1803) 187.

AMBOINA, Paso, *Rel. Robins. 1832*, October 31, 1913, along the beach.

Along the seashore, tropical Africa, Asia, Malaya, Australia, and Polynesia.

MYTACEAE

EUGENIA Linnaeus

EUGENIA MOLUCCANA nom. nov.

Eugenia acuminata Roxb. Hort. Beng. (1814) 37, *nomen nudum*, Fl. Ind. ed. 2, 2 (1832) 492, non Link.

Syzygium acuminatum Miq. Fl. Ind. Bat. 1[1] (1855) 452.

AMBOINA, Hitoe messen, *Rel. Robins. 2047*, October 18, 1913, in forests, altitude about 400 meters.

This species was first described from specimens originating in the Moluccas and cultivated in the botanic garden at Calcutta. It is well figured by Wight, Ic. 2: *t. 607*.

EUGENIA BOERLAGEI sp. nov. § *Jambosa*.

Frutex circiter 3 m altus, glaber, ramis ramulisque rubro-brunneis, tenuis, teretibus, laevis; foliis brevissime petiolatis, chartaceis, subellipticis, usque ad 12 cm longis, utrinque subaequaliter angustatis, basi acutis, apice late obtuse acuminatis,

nervis utrinque circiter 10, tenuis, distinctis, anastomosantibus; inflorescentiis lateralibus terminalibusque, tenuis, 3-floris, circiter 6 cm longis, floribus longissime pedicellatis, calycis circiter 7 mm diametro, basi longe angustatis; petalis glandulosopunctatis, subreniformibus, circiter 6 mm diametro.

An erect entirely glabrous shrub about 3 m high, the branches and branchlets slender, terete, reddish-brown, smooth, the bark on the older branches somewhat flaky. Leaves chartaceous, subelliptic, 7 to 10 cm long, 3 to 6 cm wide, subequally narrowed to the acute base and to the short and obtusely acuminate apex, brownish-olivaceous when dry, somewhat shining, the lower surface minutely and rather densely pustulate or pustulate-puncticulate; lateral nerves about 10 on each side of the midrib, slender, distinct, irregular, nearly straight, anastomosing into a somewhat arcuate marginal nerve about 5 mm from the edge of the leaf, this nerve as prominent as the lateral ones, a secondary, much fainter intramarginal nerve usually present, the reticulations faint; petioles about 1 mm long. Inflorescences 3-flowered, terminating the branchlets and springing from the old branches or trunk, about 6 cm long, the peduncles slender, about 3 cm long, the pedicels and flowers about as long as the peduncles. Flowers white, the calyx about 1.5 cm long, 7 mm in diameter at the throat, narrowly funnel-shaped, narrowed below into a long slender pseudostalk, the lobes 4, reniform, rounded, glandular-punctate, 3 mm long, 6 mm wide, persistent. Petals free, subreniform, glandular-punctate, about 6 mm in diameter. Stamens about 10 mm long.

AMBOINA, Liang, *Rel. Robins. 1872*, November 29, 1913, in thickets at an altitude of about 8 meters, locally known as *jambu karang*.

A species well characterized by its lateral and terminal, slender, 3-flowered inflorescences, its long pedicels, and long, narrowed calyx-tube, which, with the sepals and petals is glandular-punctate. The species is dedicated to the late Doctor J. G. Boerlage who contracted a fever while carrying on a botanical exploration of Amboina in the year 1900, which resulted in his untimely death.

EUGENIA sp. § *Jambosa*.

AMBOINA, Waë, *Rel. Robins. 1871*, November 29, 1913, in light forests, altitude about 20 meters, locally known as *kayu mera karang*.

The specimen presents only very young flowers and is scarcely in condition for further identification except by comparison with authentically named specimens.

EUGENIA sp. § *Jambosa*.

AMBOINA, Way tommo, *Rel. Robins. 1873*, along river banks, altitude about 50 meters, the specimen with detached fruits. Not in condition for further identification.

MELASTOMATACEAE

DISSOCHAETA Blume

DISSOCHAETA ROBINSONII sp. nov. § *Diplostemones.*

Frutex scandens, ramulis inflorescentiisque densissime brunneo-stellato-tomentosis; foliis oblongo-ovatis, acute acuminatis, tenuiter apiculatis, basi late rotundatis, chartaceis, usque ad 10 cm longis, supra glabris, nitidis, subtus brunneo-stellato-tomentosis, basi 5-nerviis; paniculis anguste pyramidatis, circiter 10 cm longis, bracteolis lineari-lanceolatis, circiter 5 mm longis; calycis circiter 11 mm longis, 6 mm diametro, deorsum gradatim angustatis, haud urceolatis, extus densissime brunneo-stellato-tomentosis pilisque paucis simplicibus instructis, lobis 4, obtusis, circiter 1.5 mm longis; petalis circiter 15 mm longis, obovatis, retusis, utrinque glabris.

A scandent shrub, the branchlets and inflorescence very densely covered with a dark-brown stellate indumentum, as are the petioles, and to a less degree the branches and lower surface of the leaves. Branches and branchlets terete. Leaves chartaceous, oblong-ovate, 8 to 10 cm long, 4 to 5 cm wide, apex slenderly acuminate and with a very slender apiculus, base broadly rounded, prominently 5-nerved, the upper surface smooth, shining, glabrous, greenish when dry, the lower brown, the nerves and nervules densely stellate-pubescent, darker than the surface which is supplied with similar scattered hairs; transverse nervules numerous, prominent, straight; petioles about 1 cm long. Panicles terminal, narrowly pyramidal, about 10 cm long, the bracteoles linear-lanceolate, about 5 mm long. Calyx-tube about 11 mm long, 6 mm in diameter at the apex, gradually narrowed below to the cuneate base, the pedicels 3 to 4 mm long, all parts very densely stellate-pubescent with dark-brown hairs, and with few, scattered, much longer, simple hairs intermixed, the lobes 4, very broad, obtuse, about 1.5 mm long. Petals 4, obovate, about 1.5 cm long, 1 cm wide, apex broadly rounded and retuse, base narrowed, acute, glabrous on both surfaces, white, the base and margins lilac. Stamens 8, the longer four with filaments 11 mm in length and anthers about 15 mm long, the latter somewhat S-shaped, linear, acuminate, the appendages filiform, flexuous, about 11 mm long.

AMBOINA, Hitoe messen, *Rel. Robins. 2024*, November 5, 1913, climbing on trees at an altitude of about 100 meters.

The alliance of this species is with *Dissochaeta annulata* Hook. f., from which it differs in numerous characters Among these are the thinner, somewhat smaller leaves; the apparently much denser indumentum; the

calyx-tube with scattered, elongated, simple hairs in addition to the stellate ones; the shorter calyx-teeth; and the entirely glabrous petals. Doctor Robinson states that the short stamens are uniformly yellow or yellowish, and that the longer ones have yellow filaments and basal parts of the anthers, but that the tips of the anthers are pale-lilac.

MEMECYLON Linnaeus

MEMECYLON COSTATUM Miq. Anal. Bot. Ind. 1 (1850) 29, ex descr.

AMBOINA, Gelala, *Rel. Robins. 2020,* September 19, 1913, on rocky stream banks, altitude about 150 meters.

Java, Sumatra, and Borneo.

MEDINILLA Gaudichaud

MEDINILLA sp.

AMBOINA, Salahoetoe, *Rel. Robins. 2022,* November 27, 1913, in forests at the summit of the mountain, altitude 1,020 meters.

The specimen presents immature fruits and no flowers and is scarcely in condition for further determination except by comparison with authentically named specimens.

OSBECKIA Linnaeus

OSBECKIA CHINENSIS Linn. Sp. Pl. (1753) 345.

AMBOINA, Soja road, *Rel. Robins. 2023,* August 1, 1913, common on grassy hillsides, altitude 50 to 300 meters.

India to Japan southward to tropical Australia.

PTERNANDRA Jack

PTERNANDRA CAERULESCENS Jack Malay Misc. 2 (1822) 61, var. **CYANEA** (Blume) Cogn. in DC. Monog. Phan. 7 (1891) 1104.

Ewyckia cyanea Blume in Flora 14 (1831) 525, Rumphia 1 (1835) 24, *t. 8.*

AMBOINA, Mahija and Hoetoemoeri road, *Rel. Robins. 2025,* 2026, August 12 and September 30, 1913, in light forests, altitude 150 to 450 meters.

Tenasserim, Indo-China, and the Malay Peninsula. The type of *Ewyckia cyanea* Blume was from Amboina.

OENOTHERACEAE

JUSSIEUA Linnaeus

JUSSIEUA REPENS Linn. Sp. Pl. (1753) 388.

AMBOINA, *Rel. Robins. 1801,* August 23, 1913, in ditches near the town of Amboina.

Tropics of both hemispheres.

JUSSIEUA LINIFOLIA Vahl Eclog. Amer. 2 (1798) 32.

AMBOINA, *Rel. Robins. 1800,* July 25, 1913, in wet places near the town of Amboina.

Widely distributed in the tropics of both hemispheres, probably a native of tropical America.

UMBELLIFERAE

HYDROCOTYLE Linnaeus

HYDROCOTYLE SIBTHORPOIDES Lam. Encycl. 3 (1789) 153.

Hydrocotyle nitidula A. Rich. in Ann. Sci. Phys. 4 (1820) 200, *t. 65, f. 33.*

Hydrocotyle rotundifolia Roxb. Hort. Beng. (1814) 21, *nomen nudum,* Fl. Ind. ed. 2, 2 (1832) 88.

AMBOINA, Roetoeng, *Rel. Robins. 1793,* September 30, 1913, on earth and stones at low altitudes, locally known as *kaki kuda.*

The specimen is apparently exactly the form described by Roxburgh as *Hydrocotyle rotundifolia* from specimens found in cultivated ground in the botanic garden at Calcutta. I can see no reason, however, why the much older name *Hydrocotyle sibthorpoides* Lam. should not be adopted, as Lamarck's description certainly applies to the same form. His type was from the Isle of France; the species is of very wide distribution in the Indo-Malayan region.

MYRSINACEAE

MAESA Forskål

MAESA ROBINSONII sp. nov.

Frutex scandens novellis parce ferrugineo-lepidotis exceptis glaber, omnibus partibus in siccitate brunneis, ramis teretibus, lenticellatis; foliis subcoriaceis, ellipticis, integris, margine revolutis, usque ad 10 cm longis, apice obtusis ad rotundatis, basi leviter inaequilateralibus, subacutis, nervis utrinque circiter 5, subtus prominentibus, reticulis obscuris; petiolo 2 ad 3 cm longo; inflorescentiis axillaribus, paniculatis, usque ad 9 cm longis, e basi ramosis, ramis paucis, patulis; floribus sessilibus, 5-meris, sepalis petalisque haud lineatis, omnino glabris.

A scandent shrub entirely glabrous, except the very young parts, which are more or less ferruginous-lepidote. All parts brown when dry. Branches and branchlets terete, the former prominently lenticellate. Leaves subcoriaceous, elliptic, entire, shining, the lower surface paler then the upper, 7 to 10 cm long, 3.5 to 5.5 cm wide, apex obtuse to broadly rounded, base acute or subacute, slightly inequilateral, margins revolute; lateral nerves about 5 on each side of the midrib, prominent on the lower surface, the reticulations obscure; petioles 2 to 3 cm long. Panicles axillary, solitary, pyramidal, up to 9 cm in length, branched from the base, the branches rather few, spreading, the lower ones up to 4 cm in length, the upper gradually shorter. Flowers numerous, sessile, 5-merous, pink. Bracteoles two, triangular-ovate, acute, 0.5 mm long. Calyx-lobes ovate, acute, entirely glabrous, not punctate, about 0.7 mm long. Petals united for

about the lower one-fifth, oblong-elliptic, obtuse or rounded, about 1.5 mm long, not punctate. Anthers oblong, about 0.8 mm long, inserted near the base of the corolla. Ovary ovoid, small, the style rather stout; ovules few. Fruit immature, ovoid, 2 mm long.

AMBOINA, Hitoe messen, *Rel. Robins. 1880* (type), November 1, 1913, climbing in trees at an altitude of about 200 meters. Apparently referable here is *Rel. Robins. 1881*, from the same locality, November 5, 1913, the leaves broadly elliptic to obovate-elliptic, 8 to 10 cm long and 5 to 8 cm wide.

A very characteristic species, readily recognizable by its elliptic, entire, obtuse to broadly rounded leaves, its axillary many flowered panicles and sessile flowers. Following Mez's key it falls near *Maesa coriacea* (A. DC.) Mez, but it is totally different from that species, and perhaps should be placed near *Maesa sarasenii* Mez. The ovules are apparently few in number, so that the species is somewhat anomalous in the section *Eumaesa*.

MAESA RUBIGINOSA Blume ex Scheff. Comm. Myrsin. Archip. Ind. (1867) 26.

AMBOINA, Amahoesoe, *Rel. Robins. 1876*, September 16, 1913, hanging over cliffs at an altitude of 40 meters.

Originally described from specimens cultivated in the botanic garden at Buitenzorg, Java, originating in Amboina. The species is well characterized by its few-flowered inflorescences, these sometimes reduced to few-flowered fascicles or the uppermost flowers sometimes solitary.

ARDISIA Swartz

ARDISIA AMBOINENSIS Scheff. Comm. Myrsin. Archip. Ind. (1867) 75.

AMBOINA, Hitoe messen and Hitoe lama, *Rel. Robins. 1883*, *1884*, October 11 and 13, 1913, in forests, altitude 125 to 200 meters.

Ardisia amboinensis Scheff. is known only from Amboina. Mez[20] has placed it in the section *Stylardisia*, but judging from our material, in full anthesis, I would place it in the section *Acrardisia*, as the styles are shorter than the petals in bud; Mez does not describe the flowers, having apparently seen only a fruiting specimen. The specimens cited above agree very closely with his description and I am confident that they represent Scheffer's species.

ARDISIA RUMPHII sp. nov. § *Pimelandra*.

Arbor circiter 5 m alta ramulis junioribus inflorescentiisque ferrugineo-pubescentibus exceptis glabra; foliis chartaceis, oblongis, usque ad 37 cm longis, obscure obtuse acuminatis, basi leviter abrupteque decurrento-acuminatis, integris, nitidis, subtus puncticulatis, nervis primariis utrinque circiter 16, subtus prominentibus, curvatis, obscure anastomosantibus; inflorescentiis axillaribus, corymboso-paniculatis, submultifloris, dense

[20] Engl. Pflanzenreich 9 (1902) 110.

ferrugineo-pubescentibus, quam petiolo paullo longioribus; floribus parvis, sepalis leviter connatis; ovario ferrugineo-tomentoso.

A tree about 5 m high, the branchlets and inflorescences, especially the latter, densely ferruginous-pubescent. Branches terete, brown, the branchlets dark-brown, sometimes pubescent, sometimes almost or entirely glabrous. Leaves oblong, chartaceous, entire, pale olivaceous-brownish, shining, 22 to 37 cm long, 8 to 10 cm wide, narrowed upward to the obscurely blunt-acuminate apex, the base rather abruptly decurrent-acuminate, sometimes more or less rounded and then somewhat decurrent, the lower surface prominently puncticulate with numerous small glands; primary lateral nerves about 16 on each side of the midrib, prominent on the lower surface, curved, anastomosing, the intermediate secondary nerves distinct; petioles 1.5 to 2 cm long. Inflorescences axillary, corymoose-paniculate, 3 to 3.5 cm long, densely ferruginous-pubescent, branched from the base, the lower branches up to 2 cm in length, the flowers numerous, subumbellately arranged near the tips of the branchlets, their pedicels stout, 2 to 2.3 mm long, the bracteoles linear, pubescent, 1.5 to 2 mm long. Buds globose, rounded. Sepals oblong-ovate, obtuse, puncticulate, pubescent, margins obscurely ciliate, about 1.5 mm long, free nearly to the base. Corolla about 1.5 mm in diameter in anthesis, the lobes elliptic-ovate, punctate, 2.5 mm long, obtuse. Anthers about 1.8 mm long, apiculate, the connective very obscurely punctate. Ovary globose, ferruginous-pubescent; style glabrous, 1.5 to 2 mm long.

AMBOINA, Waë, *Rel. Robins. 1875*, November 29, 1913, in light forests, altitude about 20 meters.

A species closely allied to *Ardisia ternatensis* Scheff., differing, however, in its longer and relatively narrower leaves, which are more or less decurrent on the petioles, shorter petioles, and somewhat longer inflorescences.

CONANDRIUM Mez

CONANDRIUM RHYNCHOCARPUM (Scheff.) Mez in Engl. Pflanzenreich 9 (1902) 156.

Ardisia rhynchocarpa Scheff. Comm. Myrsin. Archip. Ind. (1867) 68.

AMBOINA, Paso, *Rel. Robins. 1882*, October 29, 1913, along the seashore.

A tree about 4 m high, with red-purple flowers. Mez's description was apparently drawn up from immature specimens. The tips of the racemes bear numerous, short-pedicelled, crowded buds, and the bracteoles are early deciduous. The racemes are axillary, solitary, simple, up to 23 cm in length, and the pedicels of the lower flowers attain a length of about 2 cm. The nearly mature petals are about 6 mm long. The species is known only from Amboina.

PLUMBACINACEAE

PLUMBAGO Linnaeus

PLUMBAGO ZEYLANICA Linn. Sp. Pl. (1753) 151.

BOETON, Baoebaoe, *Rel. Robins. 2492*, July 13, 1913.

Widely distributed in the tropics of the Old World.

SAPOTACEAE

SIDEROXYLON Linnaeus

SIDEROXYLON sp. aff. *attenuatum* A. DC.

AMBOINA, Waë, *Rel. Robins. 1817*, November 26, 1913, along the seashore, locally known as *bunga tanjong*.

This is possibly included in the description of *Lignum eurinum* Rumph. Herb. Amb. 3: 63, *t. 35*, but is not the form figured by Rumphius. In *Lignum eurinum* the leaves are acuminate to acute, but in the specimen cited above they are obovate, the apex broadly rounded. It is probably specifically distinct from *Sideroxylon attenuatum* A. DC., but unfortunately the flowers are very immature.

EBENACEAE

MABA Forster

MABA ROSTRATA sp. nov. § *Rhipidostigma*.

Arbor parva, monoica, usque ad 10 m alta, ramulis junioribus subtus foliis ad costa inflorescentiisque pubescentibus; foliis oblongis, firme chartaceis vel subcoriaceis, nitidis, usque ad 23 cm longis, apice breviter obtuse acuminatis, basi cordatis, nervis utrinque circiter 13, prominentibus; inflorescentiis cymosis, axillaribus et e axillis defoliatis; floribus 3-meris, staminibus 9; ovario 6-loculare; fructibus oblongo-ellipsoideis, utrinque angustatis, apice prominente rostratis, usque ad 4.5 cm longis, extus verruculosis, in siccitate brunneis, sursum leviter adpresse hirsutis.

A small tree attaining a height of 10 m and a diameter of 12 cm. Branches reddish-brown, glabrous, the branchlets rather densely subcinereous-pubescent with short hairs. Leaves oblong, firmly chartaceous to subcoriaceous, 9 to 23 cm long, 4 to 7 cm wide, apex shortly, broadly, and obtusely acuminate, base cordate, rarely merely rounded, the upper surface quite glabrous, dark-brown or somewhat olivaceous-brown when dry, shining, the lower surface a little paler, pubescent on the midrib, often also sparingly pubescent on the nerves; lateral nerves about 13 on each side of the midrib, prominent, anastomosing, the reticulations lax; petioles about 5 mm long, pubescent, ultimately nearly glabrous. Cymes axillary and in the axils of fallen leaves, staminate and pistillate ones on the same plant, or sometimes

apparently on different plants. Staminate cymes densely pubescent, 1 to 2 cm long, peduncled or branched from the base, flowers numerous, but few opening at one time. Pedicels about 1 mm long. Calyx densely pubescent, about 3 mm long, the lobes 3, oblong-ovate, acuminate, 1 to 1.5 mm long, not imbricate. Corolla-tube (in bud) about 7 mm long, rather slender, pubescent, somewhat angled, the lobes, before anthesis, about 6 mm long. Stamens 9, sub 2-seriate, inserted near the base of the tube, the filaments and anthers glabrous, the former 1 to 2 mm long, the latter about 1.5 mm long, slenderly apiculate. Female flowers not seen, the cymes apparently few-flowered, axillary, their peduncles in fruit up to 3 cm in length. Sepals three, persistent, ovate, acute, about 4 mm long. Fruit oblong-ellipsoid, narrowed at both ends, about 4.5 cm long, 2 cm in diameter in the middle, the pericarp brown when dry, verruculose, the apical part sparingly appressed-pubescent, the apex prominently rostrate, the beak stout, less than 1 cm long, 6-celled, 6-seeded. Seeds about 2.5 cm long.

AMBOINA, Hitoe lama, *Rel. Robins. 1853* (type), October 11, 1913, in forest, altitude about 150 meters; Lateri, *Rel. Robins. 1670, 2039*, September 9 and August 25, 1913, in forest, altitude 150 to 200 meters; locally known as *palala daun alas, pala ulan, belu itam,* and *daun gayam.*

A species manifestly closely allied to the Bornean *Maba punctata* Hiern, from which it is distinguished especially by its very differently shaped, prominently rostrate fruits, its longer staminate, and much longer pistillate inflorescences, and other minor characters.

SYMPLOCACEAE

SYMPLOCOS Jacquin

SYMPLOCOS SYRINGOIDES Brand in Engl. Pflanzenreich 6 (1901) 41.

AMBOINA, Soja road, *Rel. Robins. 1927, 1928*, August 1 and 4, 1913, a shrub 3 to 5 m high, on hill sides, altitude 50 to 100 meters; locally known as *kayu loba* and *kayu reha.*

Known only from Amboina, and very closely allied to the widely distributed *Symplocos javanica* (Bl.) Kurz, which is also reported by Brand from Amboina.

OLEACEAE

JASMINUM Linnaeus

JASMINUM ZIPPELIANUM Blume Mus. Bot. 1 (1850) 279.

AMBOINA, Waë, *Rel. Robins. 1797*, November 29, 1913, on trees at an altitude of about 20 meters.

Known only from Amboina.

JASMINUM AMBOINENSE sp. nov.

Frutex scandens, ramulis junioribus inflorescentiisque distincte pubescentibus; foliis oppositis, simplicibus, firme chartaceis vel

subcoriaceis, oblongo-ovatis ad late ovato-lanceolatis, glabris, tenuiter acute acuminatis, basi rotundatis ad subacutis, peninerviis, usque ad 11 cm longis, nervis utrinque circiter 7, petiolo articulato; inflorescentiis terminalibus, paniculatis, multifloris, calycis laciniis 6 ad 8, haud 1 mm longis.

A scandent shrub, the leaves and branches glabrous, the young branchlets and inflorescence, including the calyces, distinctly pubescent with short, rather pale hairs. Branches and branchlets dark reddish-brown when dry, smooth, not lenticellate, terete. Leaves opposite, firmly chartaceous to subcoriaceous, oblong-ovate to broadly ovate-lanceolate, 6 to 11 cm long, 3 to 5 cm wide, dull and brownish-olivaceous when dry, gradually narrowed upward to the slender and sharply acuminate apex, the base rounded to subacute; nerves about 7 on each side of the midrib, distinct, obscurely anastomosing, not impressed, the reticulations lax, obscure; petioles glabrous, 8 to 10 mm long, jointed below the middle. Panicles terminal, pubescent, rather many-flowered, the bracteoles and bracts pubescent, acicular or linear, 1 to 2 mm long, partial inflorescences in the axils of the upper reduced leaves, forming a somewhat leafy inflorescence 8 to 10 cm in length. Calyx-tube somewhat funnel-shaped, 2 to 3 mm long, pubescent, narrowed below to the pedicel, the teeth 6 to 8, short, narrow, pubescent, less than 1 mm long.

AMBOINA, Hitoe messen, *Rel. Robins. 2032*, October 10, 1913, climbing on trees at an altitude of about 150 meters.

This species, apparently not previously described, resembles *Jasminum bifarium* Wall. in general appearance and in its vegetative characters. It is distinguished, however, by its very short calyx teeth.

JASMINUM CELEBICUM sp. nov.

Frutex ut videtur scandens, glaber vel ramulis junioribus minute puberulis; foliis oppositis, simplicibus, firme chartaceis, oblongo-ovatis ad late oblongo-lanceolatis, usque ad 7 cm longis, tenuiter acute acuminatis, basi acutis ad rotundatis, nervis utrinque circiter 7, tenuibus; inflorescentiis terminalibus axillaribusque, paucifloris, pedunculatis, calycis lobis 6 ad 8, linearis, glabris, circiter 6 mm longis, quam tubo triplo longioribus.

A shrub, apparently scandent, quite glabrous except for some of the younger branchlets, which are minutely puberulent. Branches and branchlets slender, terete, brownish or brownish-red. Leaves simple, opposite, firmly chartaceous, brownish-olivaceous or very dark-brown when dry, dull or slightly shining, 4 to 7 cm long, 2 to 3 cm wide, base rounded to subacute, apex slenderly and sharply acuminate; lateral nerves about 7 on each side of the midrib, slender, obscurely anastomosing, the reticu-

lations obsolete or nearly so; petioles 3 to 5 mm long, jointed below the middle. Inflorescence terminal and terminating short lateral branches, or in the axils of the upper leaves, slender, peduncled, few-flowered, usually about three flowers in each inflorescence, the peduncle often supplied with a few, oblong, apiculate, greatly reduced leaves or leaf-like bracts less than 1 cm long, the bracteoles very slender, linear-acicular, 2 to 3 mm long. Calyx-tube glabrous, cup-shaped, about 2 mm long, the teeth 6 to 8, linear, glabrous, persistent, about 6 mm long. Corolla-tube 7 to 8 mm long.

CELEBES, Macassar, *Rel. Robins. 2450,* July 11, 1913.

Perhaps as closely allied to *Jasminum ensatum* Blume as to any other species, but the petioles, peduncles, and calyces quite glabrous; the leaves much smaller; and the calyx-lobes relatively much longer.

LINOCIERA Swartz

LINOCIERA RAMIFLORA (Roxb.) Wall. Cat. (1831) No. 2824.

Chionanthus ramiflora Roxb. Hort. Beng. (1814) 3, *nomen nudum*, Fl. Ind. ed. 2, 1 (1832) 107.

AMBOINA, Liang, *Rel. Robins. 1798*, November 29, 1913, in thickets at an altitude of about 15 meters.

Chionanthus ramiflora Roxb. was described from specimens cultivated in the botanic garden at Calcutta originating in the Moluccas, probably Amboina. The typical form is also cultivated in the botanic garden at Buitenzorg, Java, from specimens originating in Amboina. I have a series of specimens before me from Burma, Indo-China, various parts of Malaya, the Philippines, and tropical Australia, that I unhesitatingly refer to this species. The Philippine forms, *Linociera luzonica* (Blume) F.-Vill., and *L. cumingiana* Vid. must both certainly be reduced to this widely distributed species.

LOGANIACEAE

STRYCHNOS Linnaeus

STRYCHNOS sp.

AMBOINA, Hitoe messen, *Rel. Robins. 2029*, October 13, 1913, in forests, altitude about 200 meters. Indicated by Mr. A. W. Hill as an undescribed species.

FAGRAEA Thunberg

FAGRAEA SPECIOSA Blume Rumphia 2 (1836) 35, *t. 81.*

Cyrtophyllum speciosum Blume Bijdr. (1826) 1022.

Fagraea elliptica Roxb. Hort. Beng. (1814) 84, *nomen nudum*, Fl. Ind. ed. 2, 1 (1832) 462.

AMBOINA, Koesoekoesoe sereh and Mahiya, *Rel. Robins. 2037*, October, 1913, in light forests, altitude 200 to 250 meters, locally known as *tonki tonki.*

Fagraea speciosa Blume is here adopted as the oldest valid specific name for this species, the original use of the name *Fagraea elliptica* Roxb. being as a *nomen nudum.* Miquel, Fl. Ind. Bat. 2 (1857) 376 reduced Blume's

species, which is fully described and excellently figured, to *Fagraea elliptica* Roxb. The Amboina specimens certainly represent Roxburgh's species, which was originally described from Moluccan material, probably from Amboina specimens. The description, which is wholly inadequate, follows: "Leaves opposite, short-petioled, broad-elliptic, smooth, and firm. Corymbs terminal, more than super-decompound. Tube of the corol cylindric. A native of the Moluccas."

Java and Amboina.

BUDDELIA Houstoun

BUDDLEIA ASIATICA Lour. Fl. Cochinch. (1790) 72.

AMBOINA, Koesoekoesoe sereh, *Rel. Robins. 2031*, August 23, 1913.

Widely distributed in the Indo-Malayan region.

MITREOLA Linnaeus

MITREOLA PETIOLATA (Walt.) Torr. & Gray Fl. North. Am. 2 (1846) 45.

Anonymos petiolata Walt. Fl. Carol. (1788) 108.

Ophiorrhiza mitreola Linn. Sp. Pl. (1753) 150.

Mitreola paniculata Wall. Cat. (1829) no. 1826; DC. Prodr. 9 (1845) 9.

Mitreola oldenlandioides Wall. Cat. (1831) no. 4350; DC. Prodr. 9 (1845) 9.

AMBOINA, Silali, *Rel. Robins. 2038*, September 22, 1913, on coral rocks, altitude about 40 meters.

The form is the one designated by Hochreutiner as *Cynoctonum mitreola* (Linn.) Britt. var. *orthocarpa* Hochr. in Bull. N. Y. Bot. Gard. 6 (1910) 284, i. e. strictly *Mitreola oldenlandioides* Wall. The species is exceedingly variable, and is widely distributed in the tropics of both hemispheres.

GENIOSTOMA Forster

GENIOSTOMA sp.

AMBOINA, Hatiwe, *Rel. Robins. 2034*, September 15, 1913, a small tree, about 5 m high, in light forests, altitude about 250 meters, locally known as *kayu tai*.

Probably an undescribed species, but the specimen presents no flowers, only very old fruits. The only species of the genus previously reported from Amboina is *Geniostoma moluccanum* Valeton in Bull. Inst. Bot. Buitenz. 12 (1902) 19, which, from the description, is a species entirely different from the one represented by the specimen cited above.

CONVOLVULACEAE

LEPISTEMON Blume

LEPISTEMON BINECTARIFERUM (Wall.) O. Kuntze Rev. Gen. Pl. 1 (1891) 446.

Convolvulus binectariferus Wall. in Roxb. Fl. Ind. 2 (1820) 47.

Lepistemon flavescens Blume Bijdr. (1825) 722.

AMBOINA, Kati-kati, *Rel. Robins. 1762*, October 5, 1913, in thickets, altitude about 80 meters.

India to the Philippines and Malaya at least as far to the southeast as Amboina.

PORANIA Burmann

PORANIA VOLUBILIS Burm. Fl. Ind. (1768) 51, *t. 21, f. 1.*

AMBOINA, *Rel. Robins. 1821*, September 25, 1913, from specimens cultivated in the town of Amboina; probably an introduced plant here.

Burma to the Philippines and Malaya.

EVOLVULUS Linnaeus

EVOLVULUS ALSINOIDES Linn. Sp. Pl. ed. 2 (1762) 292.

AMBOINA, Soja road, *Rel. Robins. 1820*, in open grassy places, altitude 150 to 300 meters.

Tropics of both hemispheres.

MERREMIA Dennstaedt

MERREMIA VITIFOLIA (Burm.) Hallier f. in Engl. Bot. Jahrb. 16 (1893) 552.

Convolvulus vitifolius Burm. Fl. Ind. (1768) 45, *t. 18, f. 1.*

AMBOINA, Kati-kati, *Rel. Robins. 1826*, October 19, 1913, in thickets at an altitude of about 70 meters.

Southeastern Asia to the Philippines and Malaya.

MERREMIA HASTATA (Desr.) Hallier f. in Engl. Bot. Jahrb. 16 (1893) 552.

Convolvulus hastatus Desr. in Lam. Encycl. 3 (1791) 547.

AMBOINA, Batoe gadjah, *Rel. Robins. 1824*, August 5, 1913, in grassy places at an altitude of 150 meters.

Tropical Africa and Asia through Malaya to tropical Australia.

IPOMOEA Linnaeus

IPOMOEA PANICULATUS (Linn.) R. Br. Prodr. (1810) 486.

Convolvulus paniculatus Linn. Sp. Pl. (1753) 156.

Ipomoea digitata Linn. Syst. ed. 10 (1759) 924.

AMBOINA, Paso, *Rel. Robins. 1823*, November 25, 1913, in thickets along roadsides near sea level.

Tropics of both hemispheres.

IPOMOEA TRILOBA Linn. Sp. Pl. (1753) 161.

AMBOINA, near the town of Amboina along the beach, *Rel. Robins. 1825*, August 22, 1913.

A native of tropical America, introduced into the Philippines at an early date from Mexico and now found throughout the Archipelago; also in the Marianne Islands, Java, Mauritius, Singapore, and perhaps in various other parts of Malaya.

IPOMOEA OBSCURA (Linn.) Ker. in Bot. Reg. *t. 239.*

Convolvulus obscurus Linn. Sp. Pl. ed. 2 (1762) 220.

BOETON, Baoe baoe, *Rel. Robins. 2418*, July 13, 1913.

India to Malaya, the Mascarene Islands and tropical East Africa.

IPOMOEA sp.

BOETON, Baoe baoe, along the beach, *Rel. Robins. 2477*, July 13, 1913.

ERYCIBE Roxburgh

ERYCIBE LATERIFLORA Elm. Leafl. Philip. Bot. 5 (1913) 1767.

AMBOINA, Hitoe lama, *Rel. Robins. 1822*, November 6, 1913, in forests at an altitude of about 75 meters.

Previously known only from Palawan, Philippine Islands.

BORAGINACEAE

EHRETIA Linnaeus

EHRETIA MICROPHYLLA Lam. Ill. 1 (1791–97) 425.

Ehretia buxifolia Roxb. Pl. Coromandel. 1 (1795) 42, *t. 57.*

AMBOINA, from cultivated (?) plants in the town of Amboina, *Rel. Robins. 1850*, September 13, 1913, locally known as *te.*

India to Malaya and the Marianne Islands.

HELIOTROPIUM Linnaeus

HELIOTROPIUM INDICUM Linn. Sp. Pl. (1753) 130.

AMBOINA, in the town of Amboina about houses, *Rel. Robins. 1851*, November 21, 1913.

Widely distributed in the tropics of the Old World.

TOURNEFORTIA Linnaeus

TOURNEFORTIA SARMENTOSA Lam. Ill. 1 (1791–97) 416.

AMBOINA, Liang, *Rel. Robins. 1852*, November 29, 1913, climbing over trees at low altitudes.

Mauritius, Java, Timor, and the Philippines.

The Amboina plant seems to be specifically identical with the Philippines form that Gagnepain, Not. Syst. 3 (1914) 33, states is identical with Lamarck's type, which was from Mauritius.

VERBENACEAE

GEUNSIA Blume

GEUNSIA PENTANDRA (Roxb.) comb. nov.

Callicarpa pentandra Roxb. Hort. Beng. (1814) 83, *nomen nudum*, Fl. Ind. ed. 2, 1 (1832) 395.

Geunsia hookeri Merr. in Philip. Journ. Sci. 7 (1912) Bot. 342.

AMBOINA, Soja, *Rel. Robins. 1860*, October 24, 1913, in light forests at an altitude of about 300 meters; Koesoekoesoe sereh, *Rel. Robins. 1861*, October 3, 1913, in light forests at an altitude of about 275 meters.

Callicarpa pentandra Roxb. was very inadequately described, the original description being as follows: "10. *C. pentandra* R. Shrubby, tender parts mealy. Leaves opposite, with an alternate one between, oblong, entire, cuspidate. Corymbs axillary. Flowers pentandrous. Stigma from three to four-lobed. A native of the Moluccas." It has been reduced to *Geunsia farinosa* Blume, but the Amboina specimens do not agree with those from Java and the Malay Peninsula. I consider that the specimens cited above represent exactly the same species that I recently described from Philippine material as *Geunsia hookeri*, and accordingly have adopted Roxburgh's specific name for it in place of the more recent *Geunsia hookeri* Merr. So far this particular species is known only from the Philippines and Amboina.

STACHYTARPHETA Vahl

STACHYTARPHETA JAMAICENSIS (Linn.) Vahl Enum. 1 (1805) 206.

Verbena jamaicensis Linn. Sp. Pl. (1753) 19.
Stachytarpheta indica Vahl Enum. 1 (1805) 206.

AMBOINA, *Rel. Robins. 1868*, August 20, 1913, near the town of Amboina, very common, locally known as *biana blau*. BALI, Boeleleng, *Rel. Robins. 2524*, July 7, 1913.

A native of tropical America, now found in all tropical countries.

STACHYTARPHETA MUTABILIS (Jacq.) Vahl Enum. 1 (1805) 209.

Verbena mutabilis Jacq. Coll. 2 (1788) 334.

AMBOINA, Batoe batoe, *Rel. Robins. 1869*, August 25, 1913, along roadsides.

A native of tropical America, now found in India, Java, Queensland, and tropical Africa.

LIPPIA Linnaeus

LIPPIA NODIFLORA (Linn.) Rich. in Michx. Fl. Bor. Am. 2 (1803) 15.

Verbena nodiflora Linn. Sp. Pl. (1753) 20.

AMBOINA, *Rel. Robins. 1863*, September 13, 1913, in waste places about the town of Amboina.

A native of tropical America, now widely distributed in all tropical countries.

VITEX Linnaeus

VITEX PUNCTATA Schauer in DC. Prodr. 11 (1847) 687.

Vitex hollrungii Warb. in Engl. Bot. Jahrb. 18 (1893) 208.

AMBOINA, Paso, *Rel. Robins. 1867*, November 25, 1913, near the beach, almost among the mangrove trees.

The type of *Vitex punctata* Schauer was from the Moluccas, and the Amboina specimen cited above agress perfectly with the description. *Vitex hollrungii* Warb., of New Guinea, of which a fragment of the type collection is before me, impresses me as being identical with the Amboina material, and the species is accordingly reduced to the much older *Vitex punctata* Schauer.

CLERODENDRON Linnaeus

CLERODENDRON MACROSTEGIUM Schauer in DC. Prodr. 11 (1847) 666.

AMBOINA, Halong, *Rel. Robins. 1864*, September 26, 1913, in forests at an altitude of about 250 meters.

I cannot distinguish this from the common Luzon and Mindoro form, and believe that it represents the same species. It has already been reported from Ceram by Miquel in Ann. Mus. Lugd.-Bat. 3 (1867) 253.

CLERODENDRON SERRATUM (Linn.) Spreng. Syst. 2 (1825) 758.

Volkameria serrata Linn. Mant. 1 (1767) 90.

CELEBES, Macassar, *Rel. Robins. 2463*, July 13, 1913.

India to Java.

CLERODENDRON THOMSONAE Balf. in Edinb. New Philos. Journ. N. S. 15 (1862) 233.

AMBOINA, *Rel. Robins. 1866*, September 13, 1913, from cultivated plants in the town of Amboina.

A native of tropical Africa, now widely cultivated in most tropical countries for ornamental purposes.

LANTANA Linnaeus

LANTANA CAMARA Linn. Sp. Pl. (1753) 627.

AMBOINA, Paso, *Rel. Robins. 1865*, October 31, 1913, along the beach, rare. BALI, Boeleleng, *Rel. Robins. 2516*, July 7, 1913.

A native of tropical America, now found in most tropical countries.

AVICENNIA Linnaeus

AVICENNIA ALBA Blume Bijdr. (1826) 821 var. **ACUMINATISSIMA** var. nov.

A type differt foliis angustioribus, longissime tenuiterque acute acuminatis.

The leaves are lanceolate to narrowly lanceolate, 7 to 10 cm long, 1 to 2 cm wide, subequally narrowed at both ends, the apex very long and slenderly subcaudate-acuminate, when young minutely and densely cinereous-puberulent on the lower surface, when mature, quite glabrous.

AMBOINA, Liang, *Rel. Robins. 1862*, November 29, 1913, along the beach, locally known as *brappat* and as *mangi mangi*.

This peculiar form, which is apparently no more than a variety of *Avicennia alba* Blume, although strongly characterized by its narrow, very slenderly and sharply acuminate, ultimately quite glabrous leaves, is certainly not included by Rumphius in his description of *Mangium album* (*Avicennia officinalis* Linn.)

LABIATAE

HYPTIS Jacquin

HYPTIS CAPITATA Jacq. Ic. Pl. Rar. 1 (1781–86) *t. 114*.

AMBOINA, *Rel. Robins. 2002*, August 23, 1913, in a sago swamp near the town of Amboina.

A native of tropical America, introduced into the Marianne Islands and into the Philippines from Mexico at an early date, now also found in Java, but not previously reported from the Moluccas.

HYPTIS BREVIPES Poir. in Ann. Mus. Paris 7 (1806) 465.

CELEBES, Macassar, *Rel. Robins. 2457*, July 11, 1913.

A native of tropical America, now widely distributed in the tropics of both hemispheres.

HYPTIS SUAVEOLENS (Linn.) Poir. in Ann. Mus. Paris 7 (1806) 472, *t. 29, f. 2*.

Ballota suaveolens Linn. Syst. ed. 10 (1759) 1100.

AMBOINA, Gelala, *Rel. Robins. 2003*, August 15, 1913, in waste places.

Like the preceding species a native of tropical America, now widely distributed in the tropics of both hemispheres.

COLEUS Loureiro

COLEUS sp.

CELEBES, Macassar, *Rel. Robins. 2461*, July 11, 1913.

SCROPHULARIACEAE

STRIGA Loureiro

STRIGA MULTIFLORA Benth. Comp. Bot. Mag. 1 (1835) 363.

AMBOINA, Soeli, *Rel. Robins. 1769*, in grass lands at an altitute of about 20 meters, the flowers pink.

Philippines, Moluccas, and tropical Australia.

ADENOSMA R. Brown

ADENOSMA JAVANICUM (Blume) comb. nov.

Herpestis javanica Blume Bijdr. (1826) 748.
Herpestis ovata Benth. Scroph. Ind. (1835) 30.
Adenosma ovatum Benth. in Hook. f. Fl. Brit. Ind. 2 (1884) 263.

AMBOINA, Batoe merah River, *Rel. Robins. 1771*, September 24, 1913, on clay banks at an altitude of about 120 meters.

Indo-China, the Philippines, and the Malay Peninsula and Archipelago.

TORENIA Linnaeus

TORENIA PEDUNCULARIS Benth. in Wall. Cat. (1831) no. 3956; Hook. f. Fl. Brit. Ind. 4 (1884) 276.

AMBOINA, Batoe merah, *Rel. Robins. 1770*, July 20, 1913, in rocky soil, altitude 5 to 15 meters. BOETON, Baoe baoe, *Rel. Robins. 2487*, July 13, 1913.

Malay Peninsula and Indo-China to the Philippines, and the Moluccas.

LINDERNIA Allioni

LINDERNIA PUSILLA (Thunb.) comb. nov.

Selago pusilla Thunb. Prodr. Pl. Cap. (1794–1800) 99.
Gratiola pusilla Willd. Sp. Pl. 1 (1797) 105.
Vandellia scabra Benth. Scroph. Ind. (1835) 36.
Vandellia pusilla Merr. in Philip. Journ. Sci. 7 (1912) Bot. 246.

AMBOINA, *Rel. Robins. 1768*, near the town of Amboina in grassy places near streams at low altitudes.

Tropical Asia and Malaya.

SCOPARIA Linnaeus

SCOPARIA DULCIS Linn. Sp. Pl. (1753) 116.

BALI, Boeleleng, *Rel. Robins. 2528*, July 7, 1913.

A native of tropical America, now widely distributed in all tropical countries.

BIGNONIACEAE

CRESCENTIA Linnaeus

CRESCENTIA CUJETE Linn. Sp. Pl. (1753) 626.

AMBOINA, cultivated in the town of Amboina, *Rel. Robins. 1780*, August 12, 1913.

The calabash tree is a native of tropical America, but is now widely distributed in various other tropical countries in cultivation; probably of comparatively recent introduction in Amboina.

GESNERIACEAE

RHYNCHOGLOSSUM Blume

RHYNCHOGLOSSUM OBLIQUUM Blume Bijdr. (1826) 741.

AMBOINA, Mahiya, *Rel. Robins. 1729*, August 12, 1913, on limestone rocks at an altitude of about 300 meters.

Burma through Malaya and the Philippines to Timor and Amboina, with a variety in India.

EPITHEMA Blume

EPITHEMA BRUNONIS Dcne. var. **LONGIPETIOLATUM** var. nov.

A typo differt foliis majoribus, usque ad 12 cm longis, inferioribus longe petiolatis, petiolo 7 ad 10 cm longo.

The leaves are equilateral or nearly so, broadly subtruncate-rounded to shallowly cordate at the base. The lower petioles attain a maximum length of 10 cm, those of the upper leaves shorter, rarely as short as 1.5 cm.

AMBOINA, Halong, *Rel. Robins. 1727*, September 26, 1913, on limestone rocks at an altitude of from 50 to 100 meters, flowers pale blue.

TRICHOSPORUM Blume

TRICHOSPORUM AMBOINENSE sp. nov. § *Holocalyx*.

Frutex scandens inflorescentiis exceptis glaber; foliis breviter petiolatis, crasse coriaceis, in siccitate pallidis, ovatis ad ellipticoovatis, 3 ad 4 cm longis, obtusis ad brevissime late acuminatis, basi rotundatis vel leviter cordatis; inflorescentiis axillaribus, solitariis vel binis, breviter pedunculatis subtrifloris, parce pubescentibus; calycis cylindraceis, subtruncatis, late breviter denticulatis, extus parce pubescentibus, 8 ad 10 mm longis; corolla coccinea, sursum gradatim ampliata, circiter 3 cm longa, extus parce pilosa, tubo leviter curvato; capsulis 8 ad 17 cm longis, circiter 3 mm diametro.

AMBOINA, Mahiya, *Rel. Robins. 1728*, August 12, 1913, hanging over rocks at an altitude of about 300 meters; locally known as *manumpang*.

The alliance of this species is manifestly with *Trichosporum* (*Aeschynanthus*) *volubile* (Jack) Nees, from which it differs in its somewhat smaller leaves; shorter, pubescent calyx; and distinctly longer corolla.

ACANTHACEAE

JUSTICIA Linnaeus

JUSTICIA PROCUMBENS Linn. Sp. Pl. (1753) 15.

Rostellularia procumbens Nees in Wall. Pl. As. Rar. 3 (1833) 101, DC. Prodr. 11 (1857) 371.

BALI, Boeleleng, *Rel. Robins. 2527*, July 7, 1913.

Widely distributed in the tropics of the Old World.

RUELLIA Linnaeus

RUELLIA FLAGELLIFORMIS Roxb. Hort. Beng. (1814) 95, *nomen nudum*, Fl. Ind. ed. 2, 2 (1832) 47.

AMBOINA, Paso, *Rel. Robins. 1790*, October 31, 1913, near the seashore.

A species originally and very imperfectly described from specimens originating in the Moluccas, possibly in Amboina. The excellent specimens here referred to Roxburgh's species agree perfectly with the description so far as it goes, and unquestionably represent it.

HYPOESTES R. Brown

HYPOESTES LAXIFLORA Nees in DC. Prodr. 11 (1857) 508.

AMBOINA, *Rel. Robins. 1789*, September 25, 1913, in Rumphius's garden, town of Amboina, locally known as *bunga burong*.

Java and the Philippines to tropical Australia. Closely allied to *Hypoestes malaccensis* Wight, and *H. decaisneana* Nees. The Amboina specimen is a close match for Philippine material, *Cuming 1019*, cited by Nees in the original description of *Hypoestes laxiflora* Nees.

ERANTHEMUM Linnaeus

ERANTHEMUM sp.

AMBOINA, *Rel. Robins. 1791*, September 25, 1913, a cultivated shrub, collected in the town of Amboina.

PERISTROPHE Nees

PERISTROPHE COMMUTATA Nees in DC. Prodr. 11 (1857) 497.

Justicia bivalvis Roxb. Fl. Ind. ed. 2, 1 (1832) 42, non Linn.

AMBOINA, *Rel. Robins. 2542*, July 22, 1913, along the river bank in the vicinity of the town of Amboina, locally known as *daun mariaya*.

Peristrophe commutata Nees was based wholly on Roxburgh's description of *Justicia bivalvis*, the latter being based on specimens from the Moluccas, in all probability from Amboina. The description, although short and very incomplete, applies unmistakably to the specimen cited above, which is distinguished from *Peristrophe bivalvis* (Linn.) Merr. (*P. tinctoria* Nees) by its much narrower, lanceolate leaves, and its much narrower, linear-lanceolate bracts.

LEPIDAGATHIS Willdenow

LEPIDAGATHIS ROBINSONII sp. nov.

Herba erecta, simplex vel parce ramosa, circiter 70 cm alta, inflorescentiis leviter ciliatis exceptis glabra; foliis submembranaceis, in siccitate olivaceis, ovatis ad oblongo-ovatis, usque ad 14 cm longis, leviter undulatis, acuminatis, basi subabrupte decurrento-acuminatis, nervis utrinque 5 vel 6; spicis terminalibus, brevibus, solitariis vel trinis, circiter 2 cm longis, in siccitate brunneis, bracteis bracteolisque subsimilis, circiter 10 mm longis, tenuiter acutissime acuminatis, parce ciliatis; calycis segmentis 5, omnibus liberis, valde inaequimagnis, superioribus et inferioribus circiter 9 mm longis, lateralibus lineari-lanceolatis, 6 ad 7 mm longis, leviter ciliatis.

An erect, simple or sparingly branched, nearly glabrous herb about 70 cm high, the older parts of the stem terete, the younger parts 4-angled, brown, with numerous small cystoliths similar to those on both surfaces of the leaves. Leaves submembranaceous, olivaceous and slightly shining when dry, glabrous, ovate, rarely oblong-ovate, entire or obscurely undulate, 8 to 14 cm long, 3.5 to 7 cm wide, gradually narrowed from about the lower one-third to the acuminate apex, the base rather abruptly decurrent-acuminate; lateral nerves 5 or 6 on each side of the midrib, rather prominent, curved; petioles 1.5 to 4 cm long. Spikes terminal, solitary, sometimes in pairs or in threes, brown when dry, dense, oblong-ovoid, about 2 cm long, scarcely secund. Bracts and bracteoles similar, sparingly but prominently ciliate on the margins above, oblong to oblong-lanceolate, long and slenderly acuminate, the acumen very sharp and apiculate, the bracts about 10 mm long and 3 to 3.2 mm wide, the bracteoles slightly smaller. Calyx 5-parted, the lobes free or nearly so, the upper one lanceolate, 9 mm long and 2 mm wide, the two lower ones free, linear-lanceolate, as long as the upper one and about 1 mm wide, the two lateral ones linear, 1 mm wide or less below, 6 to 7 mm long, much narrowed upward, all more or less ciliate, and very slenderly and sharply acuminate.

AMBOINA, Koesoekoesoe sereh and Soja, *Rel. Robins. 1785*, August, 1913, in forests, altitude 200 to 400 meters.

A species perhaps as closely allied to *Lepidagathis capitata* O. Kuntze as to any other species; well characterized, however, by its short, brown spikes; its rather large, long-petioled, peculiarly shaped leaves; its sparingly ciliate bracts and bracteoles; and its very unequal calyx-segments, the two lower ones being free or at least only very slightly united, the two lateral ones being narrower, and much shorter than the other three.

PSEUDERANTHEMUM Radlkofer

PSEUDERANTHEMUM DEPAUPERATUM sp. nov.

Planta erecta, simplex vel parcissime ramosa, herbacea e basi suffruticosa, 10 ad 25 cm alta, partibus junioribus inflorescentiisque minute pubescentibus; foliis membranaceis vel chartaceis, ovatis ad oblongo-ovatis, 3 ad 6 cm longis, obscure acuminatis ad obtusis, nervis utrinque circiter 5; inflorescentiis terminalibus, racemosis vel anguste et depauperato-paniculatis; floribus albis, circiter 1.5 cm longis, sepalis linearis, acuminatis, 3 ad 6 mm longis.

An erect, simple or sparingly branched herbaceous plant from a suffrutescent base, 10 to 25 cm high, nearly glabrous except the rather minutely pubescent younger parts and inflorescence. Suffrutescent parts of the stems terete, smooth, shining straw-

colored, the herbaceous parts subolivaceous. Leaves ovate to oblong-ovate, chartaceous or submembranaceous, 3 to 6 cm long, 1 to 2.5 cm wide, acuminate to obtuse, base usqally rather abruptly decurrent-acuminate, the cystoliths minute, numerous on both surfaces; lateral nerves about 5, slender, distinct; petioles about 1 cm long. Inflorescence, terminal, racemose, or a narrow, depauperate panicle, up to 10 cm in length, pubescent, the flowers white, rather scattered, solitary, or the lower ones few and on very short branches. Pedicels 1 to 2 mm long, pubescent, the bracts very small, oblong, less than 1 mm long. Calyx cleft nearly or quite to the base into five, linear, acuminate, 3 to 4 mm long, equal segments, rather minutely pubescent. Corolla-tube about 1.5 cm long, slender, cylindric, the lobes 5, spreading, two somewhat larger than the other three, elliptic, rounded, 4 to 5.5 mm wide, 7 to 8 mm long. Stamens 2; anthers slightly exserted, 2-celled, cells contiguous, rounded, base acute, the pollen typical "spangenpollen." Capsules 1 to 1.4 cm long. Seeds 4, flattened, foveolate, rounded, nearly 3 mm long.

AMBOINA, Halong, on limestone rocks, Batoe merah, and near the town of Amboina, *Rel. Robins. 1792* (type) August and September, 1913, altitude 5 to 50 meters. The same form is represented by *Merrill 5346* from Palmas Island, southeast of Mindanao, a small islet belonging to the Dutch East Indies, not to the Philippines.

A species well characterized by its small size, suffrutescent basal parts, and slightly pubescent inflorescences which are terminal, racemose or depauperate-paniculate, and its comparatively small leaves.

THUNBERGIA Retzius

THUNBERGIA GRANDIFLORA Roxb. Hort. Beng. (1814) 45, Fl. Ind. ed. 2, 3 (1832) 34, Spreng. Syst. 2 (1825) 828.

Flemingia grandiflora Roxb. ex Rottl. in Ges. Naturf. Fr. Neue Schr. 4 (1803) 202.

AMBOINA, *Rel. Robins. 1786*, September 16, 1913, in hedges, town of Amboina, September 16, 1913.

A native of India, now widely cultivated in various tropical countries.

THUNBERGIA ALATA Bojer in Hook. Exot. Fl. (1823–27) *t. 177.*

AMBOINA, *Rel. Robins. 1788*, July 22, 1913, along river banks, town of Amboina, locally known as *bunga tikus.*

A native of tropical Africa, now widely distributed in the tropics of both hemispheres.

SANCHEZIA Ruiz and Pavon

SANCHEZIA NOBILIS Hook. f. in Curtis's Bot. Mag. *t. 5594.*

AMBOINA, *Rel. Robins. 1787*, July 25, 1913, along small streams in a sago swamp near the town of Amboina.

A native of South America, probably of recent introduction into Amboina from Java, where it is cultivated as an ornamental plant.

ASYSTASIA Blume

ASYSTASIA GANGETICA (Linn.) T. And. in Thwaites Enum. Pl. Zeyl. (1859–64) 235.

Justicia gangetica Linn. Cent. Pl. 2 (1756) 3, Amoen. Acad. 4 (1759) 299.

Asystasia coromandelica Nees in Wall. Pl. As. Rar. 3 (1832) 89.

AMBOINA, *Rel. Robins. 1784*, July and August, 1913, along river banks near the town of Amboina.

A native of tropical Asia, now widely distributed in the tropics of the Old World, probably largely distributed as an ornamental plant, but readily establishing itself.

CUCURBITACEAE

MELOTHRIA Linnaeus

MELOTHRIA MUCRONATA (Blume) Cogn. in DC. Monog. Phan. 3 (1881) 608.

Bryonia mucronata Blume Bijdr. (1826) 923.

AMBOINA, Soja, *Rel. Robins. 1870*, October 24, 1913, in light woods, altitude about 225 meters.

India to Formosa, southward to Java, Borneo, Celebes, and Amboina.

CAMPANULACEAE

ISOTOMA Lindley

ISOTOMA LONGIFLORA (Mill.) Presl Prodr. Lobel. (1836) 42.

Rapuntium longiflorum Mill. Gard. Dict. ed. 8 (1768) no. 7.

AMBOINA, *Rel. Robins. 1848*, July 29, 1913, in drains along fence rows in the town of Amboina.

A native of tropical America, now widely distributed in many other tropical countries, cultivated and spontaneous.

PRATIA Gaudichaud

PRATIA OVATA Elm. Leafl. Philip. Bot. 2 (1909) 593.

AMBOINA, Kati-kati, *Rel. Robins. 1847*, October 19, 1913, in a wet meadow at an altitude of about 70 meters.

Known from a number of localities in the Philippines, from northern Luzon to southern Mindanao, but not previously reported from any region outside of the Philippines. It may prove to be a species of *Lobelia* when the mature fruits are known.

GOODENIACEAE

SCAEVOLA Linnaeus

SCAEVOLA OPPOSITIFOLIA Roxb. Hort. Beng. (1814) 85, *nomen nudum*, Fl. Ind. ed. 2, 1 (1832) 528.

AMBOINA, Caju poeti, *Rel. Robins. 1730*, August 2, 1913, in open woods at an altitude of about 350 meters.

A species of the section *Enantiophyllum* known only from Amboina and Ternate. It was originally described from Amboina specimens.

COMPOSITAE

VERNONIA Schreber

VERNONIA MOLUCCENSIS (Blume) Miq. Fl. Ind. Bat. 2 (1857) 19.

Cyanthillium moluccense Blume Bijdr. (1826) 890.

AMBOINA, Hitoe messen, *Rel. Robins. 1839*, October 14, 1913, clearings in light forests at an altitude of 175 meters; Mahija, *Rel. Robins. 1834*, August 12, 1913, on limestone formation, altitude about 300 meters; locally known as *biana perumpuan*.

The identification with *Vernonia moluccensis* Miq. has been made wholly from a comparison of the specimens with the published descriptions, and needs verification by comparison with type or authentically named material. Reported only from the Moluccas.

ELEPHANTOPUS Linnaeus

ELEPHANTOPUS SCABER Linn. Sp. Pl. (1753) 814.

AMBOINA, near the town of Amboina, *Rel. Robins. 1842*, July 31, 1913, on a fern-covered hillside. BALI, Boeleleng, *Rel. Robins. 2522*, July 7, 1913.

All tropical countries, probably a native of tropical America.

EUPATORIUM Linnaeus

EUPATORIUM sp.

AMBOINA, Kati-kati, *Rel. Robins. 1844*, October 19, 1913, from cultivated specimens.

I am unable to determine this plant to the species from the literature and material available for comparison at this time. It is apparently an exotic species, judging from the fact that it occurs in Amboina in cultivation.

SPARGANOPHORUS Vaillant

SPARGANOPHORUS VAILLANTII Crantz Instit. 1 (1766) 261.

AMBOINA, near the town of Amboina, *Rel. Robins. 1843*, July 22, 1913, along streams.

Tropical Africa and America, introduced in the Malayan region, Java, Singapore, etc.

MIKANIA Willdenow

MIKANIA SCANDENS (Linn.) Willd. Sp. Pl. 3 (1800) 1743.

Eupatorium scandens Linn. Sp. Pl. (1753) 836.

AMBOINA, Gelela, *Rel. Robins. 1838*, September 19, 1913, along small streams at an altitude of about 40 meters.

Tropics of both hemispheres.

ERIGERON Linnaeus

ERIGERON LINIFOLIUS Willd. Sp. Pl. 3 (1800) 1955.

AMBOINA, Soja, *Rel. Robins. 1840*, August 4, 1913, along roadsides, altitude about 400 meters, only two plants seen.

Widely distributed in most warm countries.

BLUMEA DeCandolle

BLUMEA LACERA (Burm.) DC. in Wight Contrib. (1834) 14.

Conyza lacera Burm. Fl. Ind. (1768) 180, *t. 59, f. 1.*

CELEBES, Macassar, *Rel. Robins. 2458*, July 11, 1913. The specimen does

not present the lyrately lobed leaves of the type, as illustrated by Burman, but seems to be the form described by DeCandolle l. c. as *Blumea lacera* var. *commersonii* DC.

Tropical Africa and Asia to Malaya.

SPHAERANTHUS Linnaeus

SPHAERANTHUS AFRICANUS Linn. Sp. Pl. ed. 2 (1763) 1314.

BALI, Boeleleng, *Rel. Robins. 2529*, July 7, 1913.

Tropical Africa and Asia through Malaya to Australia.

SYNEDRELLA Gaertner

SYNEDRELLA NODIFLORA (Linn.) Gaertn. Fruct. 2 (1791) 456, *t. 171, f. 7.*

Verbesina nodiflora Linn. Cent. Pl. 1 (1755) 28.

AMBOINA, common in waste places about the town of Amboina, *Rel. Robins. 1835*, August 20, 1913.

A native of tropical America, now widely distributed in all tropical countries.

TRIDAX Linnaeus

TRIDAX PROCUMBENS Linn. Sp. Pl. (1753) 900.

AMBOINA, in waste places near Castle Victoria, *Rel. Robins. 1841*, August 11, 1913.

A native of tropical America, introduced and now abundant in parts of India, Indo-China, the Malay Peninsula, etc., but not as yet found in the Philippines.

COSMOS Cavanilles

COSMOS CAUDATUS HBK. Nov. Gen. Sp. Pl. 4 (1816) 240.

AMBOINA, Lateri, *Rel. Robins. 1837*, August 25, 1913, locally known as *sunga sunga blanda.*

A native of tropical America, now widely distributed in other tropical countries.

TITHONIA Desfontaine

TITHONIA DIVERSIFOLIA A. Gray in Proc. Am. Acad. 19 (1883) 5.

AMBOINA, *Rel. Robins. 1845*, August 19, 1913, river banks, near the town of Amboina, from the field note apparently spontaneous.

A native of Mexico, probably of very recent introduction in Amboina, as it is in other parts of Malaya, where it is cultivated for ornamental purposes.

ERECHTITES Rafinisque

ERECHTITES VALERIANIAEFOLIA (Wolf) DC. Prodr. 6 (1837) 295.

Senecio valerianiaefolius Wolf Ind. Sem. Hort. Berol. (1825), ex Reichenb. Ic. Bot. Exot. 1 (1827) 59.

AMBOINA, Soja, *Rel. Robins. 1836*, August 4, 1913, roadsides at an altitude of about 400 meters.

A native of Brazil, introduced and now widely distributed in the Malay Archipelago and the southern Philippines.

ERRATA

Page 45, line 11 from the bottom, for *abyssinisa* read *abyssinica*.
Page 72, line 11 from the bottom, for **fauciflorus** read **pauciflorus.**
Page 101, line 15 from the bottom, for *Rhumphianae* read *Rumphianae.*

INDEX

[New genera, new species, and combinations published for the first time are in black-faced type; synonyms and species incidentally mentioned in the text are in *italics*.]

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